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THOUGHT, VOLITION AND THE ORGANISM

THE VERY WORDS *intellect* and *intellection* sound thin, and since robustness to most of us is a matter of sense, I propose to sketch some aspects of what may be called the biological basis of intellect and will according to the philosophical psychology of Aquinas. Biology here means an appreciation of the general sweep of life, rather than a specialized attention to the behaviour of genes and suchlike.

The old classical psychology, the parallel and contemporary of the old classical physics, strongly influenced the textbooks of philosophy used by students training for divinity. Its position can be called Platonic, somewhat in the same sense that the architecture and mannered pastoral verse of the period can be called Hellenic. Sometimes limpidly, often brilliantly, it looked at the soul and psychic activities as realities apart, if parallel, to the world of matter exploited by the physicists. This *ancien régime* still survives in religious and academic groups, though it has been generally displaced by the psychologies of appetite and urge that historically derive from the romantic movement. As regards the nature of intellection, it has been criticized by the great body of physiological psychol-

ogy on the one side, and on the other by the psychologies of *élan vital.* Port Royal has been forsaken for Würzburg and Leipzig, Vienna and Berne.

Yet Aquinas is at once more ancient and more modern. His rationalism is strongly marked, but it does not seem to breathe the air of a court of spiritual wigs and lace and deportment. I hope to show by implication that he is untouched by the attack on a still current religious psychology of the soul which is launched from materialism and from appetite-psychology, and which indeed is sometimes conducted along lines he himself would approve. The first part of this paper will consider the *physical* character of his doctrine of intellection; the second part will make the same attempt on volition. In both cases the main reference will be to the *Prima Pars* of the *Summa Theologica.*

I

The position in the *Summa* of the questions dealing with human intelligence must first be noted. They start [1] after the treatise on the days of creation. It need scarcely be said that the approach of Aquinas to Genesis is not that of a Protestant Fundamentalist, and yet his psychology must be seen against this background of water and earth and seed and great whales and creeping things and cattle. I think that in the classical psychologies of the mental life (as also in some of the contemporary theologies of the spiritual life), with their clear ideas and delicate airy mechanisms aloof from the rude living world, the thought is more cosmetic than cosmic, and that this does something to explain and justify the resentment shown by later biological and conative psychologists.

Aquinas, on the contrary, treats with respect the crude theories of knowledge put forward by the early Ionian *phusikoi,* the *antiqui naturales,* who held that the soul knows earth because it is earthy, fire because it is fiery, and so on.[2] His sense of the organic basis of knowledge does not desert him even

[1] *Summa Theol.,* I, q. 75. [2] E. g., *ibid.,* q. 85, a. 2.

when he is dealing with the superior activities of the soul.[3] His treaties on psychology (or rather, in the old sense of the word, on anthropology) is introduced by the definition of soul, or psyche, as the first principle of vital activity.[4] If psychology is a study of the soul, there is then a plant and animal psychology, as well as a human; for vital activity comprises not only thoughts and choices but also unconscious stirrings.

Such notions strike the many who are still dominated by the psychology of Descartes with a sense of impropriety. And they will find it no recommendation of Aquinas when he is praised by dialectical materialists for being so racy of the soil, so little inclined to escape from the present world to a world of essences set apart.[5] Another paper would be required to follow the alternating play of his argument, as it were now for materialism by fusing soul with body, now for idealism by freeing its inmost persistency from the contact; a dialectic of thesis, antithesis, and synthesis worked out with more detail in other works than in the *Summa*. At present we are only occupied with some effects of this on his doctrine of intellection.

At this stage, two observations can be made. First, that intellection is only part of the field of human psychology, for the Cartesian conception of the soul as a thinking substance is not accepted; and secondly, that intellection itself cannot be fully explicated in the logical medium of " thinking."

With respect to the first observation, the intellectualism of Aquinas is too well appreciated for there to be any suspicion of his drowning cognition in appetite. So many hard things, however, have been said about faculty-psychology, not least as regards the divisions of cognitive abilities, that it is well to emphasize how he keeps sight of the fact that it is the whole man, single and entire, that is the proper study of the psychologist.[6] Scientific partitioning there must be, and separate treatment of different functions, but never what Spearman calls the " hypo-

[3] *Ibid.*, q. 88, aa. 1, 2; q. 89, a. 1. [4] *Ibid.*, q. 75, a. 1.

[5] Cf. John Lewis, *Introduction to Philosophy* (Gollancz).

[6] *Summa Theol.*, I, q. 76, a. 8. That the soul is entire in every part of the body is the last thesis before the faculties of the soul are studied.

thesis of mannikins." The intellect, therefore, is never regarded as a thing, still less as the thing. By the very exactness of its faculty-psychology, the *Summa* cannot regard the intellect as a cause, or as a compartment; it is an accident, *entis*, one modification among others of a single complex substance called a man. He is the cause, who not only understands, but also loves and imagines and fears and digests and whose nervous connections may be measured by electricity. This substance is, in the first place, a person, unique, incommunicable; incapable of being equated with a sum of abstractions. In the second place, it is not a mind, but a rational animal; which fact is sufficient to rule out a purely spiritual human psychology. And in the third place, its conscious deliberations occupy only a phase between the beginning and end of its activity; which fact rules out a psychology wholly devoted to what may be called a psychology of good-citizenship.

This leads to the second observation, for having delimited the place of intellect in the field of psychology, it will be well to note, also in contrast to the mentalist tradition, that intellection itself must not be read only in terms of concepts, judgments, and reasonings; in terms, that is, of strictly logical processes. The first reference here must go out of human psychology to where intellection as such can be studied, without the ambiguity of the creature. Such reference to the treatise on the divine knowledge[7] is here made not to draw any moral, but severely in order to elucidate the nature of knowledge. And metaphysical principles are advanced without apology; for even if their truth is not accepted, at least they afford a useful system of reference, and that not only for the history of philosophy.

In the prologue Aquinas observes that he is going to treat together of divine knowledge and life, "because to know is to live," and in the first discussion,[8] intellection is described, not as a commentary on reality, but as the highest living possession of and within reality.

[7] *Ibid.*, q. 14.
[8] *Ibid.*, a. 1.

Things that know differ from those which do not know in this, that the latter have their own form only, while the former by their nature can have the form of other things as well. Wherefore, the nature of unknowing things is more confined and limited, while the nature of knowing things has a greater breadth and range, for which reason Aristotle observed how in a manner the soul can become all things. But the limitation of a form is from matter, and it follows that the less material a form is, so much the greater is its scope. It is clear, therefore, that the spirituality of a thing is the reason why it can know, and that its degree of spirituality will determine its degree of knowing.

Terms such as " spiritual " and " material " need not here be taken in any advanced or question-begging sense, spiritual meaning bodiless and immortal, but merely as the appropriate equivalents of act and potentiality. The argument applies to all degrees of knowledge, from what may be supposed to be the impressions of freshwater polyps to God's comprehension of Himself. Despite the scholastic grammar of the argument, the thought is fairly simple, and corresponds to general experience: knowing is becoming something else in some way, and yet it is different from all other becomings or changes, because by knowing we do not thereby cease to be ourself. It is this subtlety, this not being committed to one kind, this freedom, this not being shut in but " naked and open," all this is meant by immateriality. Indeed, it is on such an analysis of the difference between knowing and unknowing things that the difference is drawn between the politics of force and of persuasion.

Intellection is supposed to be the highest grade of knowledge, and yet now it is often given a bad name, contrasted unfavourably for its alleged remoteness and deviousness with the immediacy and directness of sensuous experience. The classical psychology must bear part of the blame for this, that and the mechanism which followed so closely. Intellection came to mean clear ideas and judgment, a measured reflection, almost a cleverness in the skull; when at its best and most typical it holds knower and known " identified in every way," [9] without

[9] *Ibid.*, q. 14, a. 2.

barrier,[10] an action that is the very substance of the knower,[11] an all-at-once comprehension without process.[12]

Such, briefly, are some headings with regard to intellect in itself. They are perfectly verified in the case of the first intellect, the cause and pattern of all others, and they must be formally verified in the case of the human soul if intellect is to be ascribed to it. True, it may be lowest in the scale of intellects,[13] needing to be informed by ideas and to develop them by argument. Nevertheless a swifter and more immediate possession is its aspiration, *desiderium naturale*, and all activity ultimately is measured by its last end.

When Aquinas first considers the nature of the human intellect, he takes up the distinction between intelligence and the logical process. The question is entitled " concerning the intellective powers," and in it there is an article, " whether reason is a power different from intelligence." [14] His answer is in the negative, " as clearly appears when the activity of both be considered. For to grasp (*intelligere*) is simply to hold a candid truth "—truth, an abstract word meaning the real thing to us, open to us; not a glossiness or shine, but a sharing of knower and known—

but to reason (*ratiocinari*) is to proceed from one thing understood to another. Men come to know by working from one thing to another, this is why they are called rational. The reasoning process is to grasping as becoming is to being, as acquiring to having, as imperfection to perfection. And because motion rises from quiet and terminates in rest, so does human reasoning set out to discover from truths simply grasped and returns to them. It is clear that to be in motion and to be at rest correspond to the same power, as appears even in natural things, for by the same force does a body gravitate and come to rest. Even more so do we both grasp and reason by the same power; wherefore intellect and reason are the same power in man.

The analogy from gravitation is not essential to the argument, yet it is to be noticed, for it is typical of Aquinas to dis-

[10] *Ibid.*, aa. 3, 6.
[11] *Ibid.*, a. 4.
[12] *Ibid.*, a. 7.
[13] *Ibid.*, a. 2, ad 3um.
[14] *Ibid.*, q. 79, a. 8.

cuss psychological and physical processes in the same breath. Here I desire to load to the utmost his statement, as significant to the psychologist as to the theologian, that reasoning comes from a state of non-reasoning and leads to a state of non-reasoning. For the moment it matters little whether this state is unreasonable because it is all murk or because it is all light, whether it is too low to be described, or too noble. It is certainly not polite. The point is this: reasoning, enthroned by the classical psychologists and banished as an irrelevant but dangerous chatterer by psychologists of desire, is seen by St. Thomas as marking only a phase in the activity of the intellect. For the present the mind is in its reasoning period. But it does not reason for reasoning's sake, but to get past reasoning, whether it be the artistic joy of argument or the quiet and simultaneous possession of all truth. There is of course no question of Aquinas arguing against the strict necessity of reasoning, or failing to respect its dignity in the interregnum of adult consciousness.

At the present time, when biological thinking is so important in the arts and sciences, it would be a pity if through the formal gardening of some of his commentators, it appeared that the psychology of mind according to Aquinas were a study of abstract patterns, which may or may not be in relation to the movement of life. On the contrary, by his temper as well as by his metaphysics, he held that to know by intellect is to possess every chord and melody, the completion of all desire,[15] which possession now only shiftingly appears in our reflective and deliberate thinking.[16]

II

As with intellect, so with will. Uplift psychology is partly responsible, for will in the course of years has become separated from the deep seated and total tendencies of the human organism towards happiness. Will-power has been set off and opposed to the set of animal drives within us; not only that, for it has also been described in such terms of conscious deliberation, that

[15] *Summa Theol.*, I-II, q. 3, aa. 4, 8. [16] *Ibid.*, a. 6.

its source in the profound and unconscious appetite of the psyche, and its culmination in the perfect embrace of the good, beyond thought, choice, and conscious rectitude, have been obscured. The will has been seen, a lonely despot, sometimes effective, more often not, in imposing an alien rule on the other psychological powers: many books of spirituality certainly bear this interpretation.

In accordance with the method of Aquinas, a parallel will be attempted in this second part of the paper between the will and the intellect. It is suggested that the will's perfect activity represents the achievement of all the purposive tendencies of the psycho-physical unity, and that its power is only partially developed in the processes of deliberation and choice.

I take it that the psychology of appetite is almost absent in the classical psychology. One effect of psychoanalysis has been to shift the accent from sensation to affect, and now it is widely accepted that cognition as such does not express propensity, striving, impulse, conation, orexis. This datum of common experience was fairly fully noted by Aristotle. " There is no good in mathematics " means that the theoretical mind can be exercised without much tug of desire from the concrete real.[17] The distinction between the two, cognition and appetite, is based on the metaphysical distinction between the True and the Good. Consequently I follow the order of the *Prima Pars*; first looking at the transcendental of goodness, then at the pure nature of will in the divine nature, finally taking the rational appetite, or will, of man.

Does saying that a thing *is* exactly express that it *is good*? Aquinas raises the question and argues along these lines.[18] As being, a thing is actual and to that extent perfect and desirable. Hence all being as being is good. Yet there is a difference of meaning. For being first means something actual, while good mean something desirable; and in the order of logic being precedes being desirable. It is easy to smudge or coarsen the metaphysical distinctions into which psychological study can

[17] *Ibid.*, I, q. 5, a. 3, ad 4um. [18] *Ibid.*, aa. 1, 2, 3.

be prolonged *viâ inventionis* and from which it derives *viâ judicii;*[19] nevertheless it can be said that a thing is constituted as a being by the efficient and formal cause, which are the first concern of intellectual knowledge; while in the changing world about us a thing is good because it is capable of attracting, and so appetite and the good are defined in terms of the final cause.[20]

Whence, God is called the supreme good by relation to all other goods.[21] But can he desire himself? Is there a divine appetite? In answering this question, Aquinas uses the principle applying to the distinction between intellection and reasoning,[22] namely that movement and rest must be referred to the same category: movement towards a good and the possession of it, in other words, desire and enjoyment, both are from the same power and are covered by the same word " appetite," though etymologically this means " stretching out." Therefore, because God possesses his own goodness, he can be said to will and to love himself.[23]

At this place Aquinas draws an important distinction, between natural appetite, the blind movement of a thing for its fulfilment, and voluntary appetite, or the love for a good somehow perceived. It should be noticed that the word " voluntary " (*voluntarium, ekousion*) does not necessarily mean a free act, nor is it restricted to acts of the will, for it is found wherever there is an appetite from within through knowledge, as in the case of animals.[24] It will be convenient at this stage before going any farther to interpolate some divisions of appetite after the received scholastic terminology and definitions.

The power of being influenced by a final cause is called appetite, and its response is called desire, though strictly speaking in terms of the emotions, this implies a not yet having. Desire may spring from the intrinsic needs of a thing, or it may be extrinsically imposed by the action of another particular cause. This is the first distinction of appetitive movements,[25]

[19] Cf. *ibid.*, q. 79, a. 8.
[20] *Ibid.*, q. 5, a. 4.
[21] *Ibid.*, q. 6, a. 1.
[22] *Ibid.*, q. 79, a. 8.
[23] *Ibid.*, q. 19, a. 1; q. 1; q. 20, a. 1.
[24] *Ibid.*, I-II, q. 6, a. 2.
[25] *Ibid.*, II-II, q. 175, a. 1.

between the spontaneous and natural (*phusikon*) and the artificial and violent (*biaion*), a distinction observed in modern psychology, notably as regards super-ego dynamics.

Instinctive movement from within may proceed unconsciously towards an end, and this has the technical names of natural desire and natural appetite (*appetitus naturalis, desiderium naturale*). In general terms, it is the transcendental relationship of every potentiality to its act. The usual examples in the *Summa* are taken from the lowest things, the gravitation of bodies for instance, nevertheless this appetite is found in man, and indeed, according to the opinion of Bañez it is the foundation of the argument for the possibility of the beatific vision. Even before knowledge begins, there is within the mind a load of immortality. From the start, it reaches out to reality. But not as yet through knowledge, which has not yet begun. This unconscious drive within the mind works in every created substance and through every power of action, except through those which by definition are powers of loving what is known.

The relevance of this scholastic position to recent psychologies of the Unconscious will be noticed, but my purpose now is to note its bearing on the nature of the will. For unforced action may come not only from the physical form (*forma naturalis*) but also, in the case of cognitive beings, from a form known (*forma intentionalis*). A thing may act from being such and such a thing, but also from being cognizant of such and such a thing.[26] This reaching to a thing known is a function of what is called elicited appetite (*appetitus elicitus, appetitus animalis*), and it comes not from the diffused insufficiency of the organism, but from a specialized ability (*facultas*) to act for a good that is perceived. The action is said to be voluntary, that is a tendency from within with a knowledge of the goal; and as has been indicated, such conscious purposive tendencies apply both to man and to animals.

This knowledge-content in the desire is called the motive. It may be an affectively-toned sense object, or it may be more

[26] *Ibid.*, I, q. 80, a. 1.

abstract and not invariably a " carrier of pleasure." The former is present in animal life, and the principle of such actions is called the sensitive appetite, distinguishable from unconscious " mechanisms." From it comes the emotional life of man, but he in addition is modified by intellectual knowledge, he can know purpose as purpose and act accordingly, and this ability of acting for some intelligible good is called the will, or rational appetite (*appetitus rationalis, intellectivus*).[27]

Here it will be well to pause at two observations, in order to strengthen the argument of this paper. First, it will have been noticed that the notion of will has been arrived at without any mention of liberty. Freewill represents only one patch in the activity of will, as ratiocination is only one patch in the activity of the intellect.[28] That the divine will is perfect and yet not free to choose essential divine goodness, this theological truism sometimes comes as a shock to a tradition that has been taught to define the will in terms of its freedom and it is a useful corrective to the idea of liberty as an ultimate value.

Secondly, and connected with the foregoing observation, the closeness of the will to the biological needs of the organism must be stressed. A connection may be traced between the ethical doctrine of duty for duty's sake, the categoric imperative of acting for what is right without reference to the psychological context, which is not the moral theory of Aquinas, and the psychology, possibly more of a practice than a theory, which treats will-power as something over and above the other forces of the organism. On the contrary, just as intellection is rooted in the real, and even in the fleshly real, so too is the desire springing from knowledge a continuation of the unconscious drives of the whole subject. The power of the will may on occasion be pitted against the hasty and unregulated activity of other powers, yet the will cannot deny its origin and, psychologically considered, works for the attainment of ends covering the whole need of the person. An example may be taken from the doctrine of the emotions, or passions; these are not sup-

[27] *Ibid.*, a. 2. [28] *Ibid.*, q. 83, a. 4.

pressed, or transformed out of recognition, but are heightened and tempered by their closeness to mind and will, to such effect that human sensuousness is a different and nobler reaction than animal sensation and emotion; it is *rationalis per participationem*.

In an important reply,[28] Aquinas marks the closeness of elicited to natural appetite, and in a sense makes the object of the former more total and satisfying.

> Every potentiality has a natural inclination to something, whence everything desires an object corresponding to its natural appetite, and above this there is the voluntary appetite (*appetitus animalis*) following knowledge, which desires something not because it answers to its own activity and to the activity of another power, for instance the impulse of the sight to see, but because it responds simply and entirely to the whole organism (*conveniens simpliciter animali*).

There is a sense in which appetite is more closely attached to the physical conditions of reality than is the intellect. For in cognition, the known is in the knower according to the conditions of the knower, but appetite is more outgoing; at its best it does not love the idea or the image, but the thing. Which principle, incidentally, works through Aquinas's theology of perfection, for though by faith the manner of knowledge is most imperfect, no bounds are set to our love of God.[30]

In the beginning of the *Prima Secundae* are considered those objects to which the will of its nature is bound without deliberation.[31] In the first place, there is goodness in general, to which the will tends of its nature, as a power to its proper object. Secondly, there is the last end: for however disguised, the motion of the will can only be set up, not by an abstraction, but by the concrete and subsisting good. Thirdly, and this is the important point to our present argument and may conclude it,

> in general everything proper to the willer according to his nature. For through the will we desire not only those things corresponding

[28] *Ibid.*, q. 80, a. 1, ad 3um.
[30] Cf. *ibid.*, q. 82, a. 3.
[31] *Ibid.*, I-II, q. 10, a. 1.

to the nature of the will, but also those things corresponding to the other powers and to the man entire (*ad totum hominem*). Whence man naturally wills not only the object of will, but also things proper to the other powers, to know, to be, to live, and everything concerning his well-being.

Such, then, are some headings to show how far removed is the psychology of Aquinas from a theory of intellect and will divorced from the biological impulse of the human organism. They are incomplete, for there are other converging arguments, from the analogy of being in high metaphysics to the reality of numerical individuation in natural philosophy. Underlying his whole psychology is the profound conviction that psychic processes are not to be artificially separated from the biological movement of the organism, and that body is for the betterment of soul.[32]

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[32] *Ibid.*, I, q. 89, a. 1.

OUTLINE OF A PHILOSOPHY OF ART

I. Introductory

A philosophy of art may have only a small and indirect bearing on the production or enjoyment of poetry, painting, music, etc., but it has a great bearing on the place we give to art in life. There are many—even philosophers—who give it a very low place; and there are others—even philosophers—who exalt it above everything else, like a revealed religion.

Is it worth while finding the true place? No one will doubt it who thinks that these extremes—resulting, for example, in the unworthiness of much "religious art," or the pretensions of the "Poet-prophet" doctrine—do harm.

But the difficulty is that aesthetics is a part of philosophy, and hence will speak directly only to those who care for philosophy. Moreover, aesthetics cannot be considered apart from the other branches of philosophy, notably psychology and cosmology. And so the first step toward achieving a theory of art is either to accept or originate a complete philosophical system. On the other hand, these are limitations which affect not only aesthetics, but philosophy in general; so a study in aesthetics may be commended to all those who think there is some use in philosophy.

The basis of the theories developed in these pages is mainly Thomism. It is a basis which will not command universal acceptance; but as the alternatives offered were either to accept or originate a complete philosophy, the Thomist may feel at least that he has chosen the less exorbitant. He will reflect also on the singlar comprehensiveness and coherence of his system, and on the notable revival of Scholastic studies in recent times. And he will note, without insisting on, the authority which tradition has given to the names of Aristotle and St. Thomas.

We remarked at the beginning that a theory of art may have

only a small and indirect bearing on the production or enjoyment of art. This admission should not stand too absolutely. The ultimate principles—those elements in which aesthetics is truly a philosophy—must indeed have so broad a focus that they can regard particulars only at a distance. Shakespeare and Giotto; their works, and we who take pleasure in them; are seen only as details in a panorama which includes the whole universe and the human spirit. But such an inclusive view is not without value even for a knowledge of the details. It is something to see the details together and in a system. And the abstract principles result in practical corollaries, applying to the production of art as well as to criticism. "Should art be imitative? What is the value of images in art? Does it make any difference to beauty whether a poem's message is true? Is art above morality?" These are questions whose answers—as we shall try to show later on—lead back to philosophy. For the rest, it is a fact that artists often come at the answers, not by way of philosophy, but through instinct and experience. However, their voice is neither so unanimous nor clear as to make other evidence useless. And there are many minds whose only approach to questions of art is through principles.

The title "Outline" indicates the scope of this essay. It does not attempt to give a complete exposition of the points of traditional philosophy involved, not only because the undertaking would seem elaborate and over-ambitious, but because it has been very well done already. The reader is referred especially to *The Philosophy of Form*, by E. I. Watkin, and to the various handbooks of Scholastic Philosophy listed in the bibliography.

Neither does the essay profess to have finally demonstrated all the elements of the theory proposed. Much experiment and explanation, for example, might be devoted to fixing the rôle of the unconscious in art, or the relation of the intellect and imagination in aesthetic emotion, or the effect of the various kinds of order, both as a means of expression, and as a means of organizing and concentrating the truth of art. The very extent of possibilities involved justifies the present summary

treatment. Where a half dozen complete books would not suffice to cover the subject, there is less urgent reason for one.

The aim of the essay has been rather to give an inclusive view, with all the elements of the theory present and displayed in their organic connection; mapping a region which can be thoroughly explored later on.

Several of the practical conclusions outlined in the closing pages of this article have long been almost axiomatic. They are reaffirmed here because they help to round out the picture and because of their intrinsic connection with the main thesis. Seen as corollaries of more ultimate principles, they receive at least a new unity and sanction, and in turn throw light upon these principles.

Finally, it will be noticed that subjects for both "experiment" and illustration are drawn mainly from literary art—the only art with which the author has any real familiarity. Hence the essay will seem rather a philosophy of poetry than of art in general. But it is not so intended. At several points the parallel between poetry and the other arts has been indicated. Elsewhere the reader must be asked to accept the assumption that what is true of one art is, *mutatis mutandis*, true of all the others.

II. Art and Mysticism

Is art mystical? For the sake of conciseness let us reply simply, No; bringing in proofs and qualifications after the conclusion.

There is a suggestive and obvious analogy between the effect produced on the mind by art, and that which theology assigns to mystical intuition,[1] and this has led many philosophers to conclude that art and mysticism are of the same nature. It is even the conclusion of certain Catholic philosophers, such as Abbé Brémond and, more recently, Father Gilby.[2] It should be noted that both Abbé Brémond and Father Gilby are careful to distinguish the mystical element in art from the full and

[1] Cf. pp. 31-32. Cf. also, Fr. Thomas Gilby, *Poetic Experience*, esp. pp. 1-12.
[2] Abbé Henri Brémond, *Prayer and Poetry*; Fr. Thomas Gilby, *op. cit.*

strict mysticism of the Beatific Vision, and—in its object at least—from the experience of contemplative saints.[3] But both use the word " mystical " or " mysticism " in reference to art.[4] Moreover, Father Gilby, in supporting his assertion that poetic knowledge is " of the same structure as the mystical knowledge of God," [5] attributes a perfection to poetic knowledge which very probably could not be realized short of full theological mysticism.

Mysticism means intuitive vision and is synonomous with contemplation. In its fullest sense this definition is verified in the Beatific Vision, which is a *supernatural* intuitive vision *of God after death*. In an approximate sense it is applied to the experience of contemplative saints in this life, an experience whose psychological nature is uncertain. To complete the definition, the terms intuition and vision must themselves be defined. Intuition is synonomous with immediate knowledge and means a mode of apprehension excluding analogy, abstraction and reasoning.[6] Vision denotes knowledge of an object *as it is*: that is, complete knowledge, embracing not only the Form of the object, but its principle of individuation: apprehending not merely a formal aspect, but the *thing*, whole and singular.

The question, then, is whether aesthetic knowledge can possibly fulfill this definition of mysticism. The question is an alternative one: can poetic knowledge be intuitive vision in the strict sense; or if not, can it be compared to the approximate mysticism of contemplative saints.[7]

[3] Gilby, *op. cit.*, pp. 51, 108; Brémond, *op. cit.*, pp. 187-200.

[4] E. g., Gilby, *op. cit.*, pp. 44, 59; Brémond, *op. cit.*, pp. 83, 91.

[5] Gilby, *op. cit.*, p. 106.

[6] *Dictionnaire de Théologie Catholique*, vol. VII, column 2351 (Article, " Intuitive (Vision) ").

Intuition is the mode both of the Beatific Vision and of angelic knowledge. In the Beatific Vision, according to the Thomist theory of knowledge, intuition implies an absence of concept. Note that when we speak of intuition of first principles, we use the word in a different sense; in this use, intuition excludes merely reasoning and, perhaps, analogy; it does not exclude abstraction.

[7] It is not intended to ignore non-Christian mysticism—the quasi-intuitive experience, that is, of such contemplatives as Plotinus, the Sufis, or the " nature-

The answer of course turns on the nature not only of poetic knowledge, but of knowledge in general. Moreover, as the Scholastic theory of knowledge derives largely from the theory of Matter and Form, it is necessary at the outset to have in mind the main features of both doctrines. The following short summaries will serve to recall the doctrines to memory, but of course do not pretend to give a full account of them, nor even adequately to introduce them to those unfamiliar with Scholastic thought.

Hylomorphism—the doctrine that all bodies are composed of Matter and Form—is the Aristotelian and Thomistic explanation of the phenomenon of substantial change. " In every kind of change, a distinction must be made between something that persists from start to finish, and those contrary determinations of which one disappears in favor of the other." [8] The problem can best be illustrated by an analogy with accidental change: thus, it is obvious that " a hot body can become cold but heat itself does not become cold." [9] So we say that, whereas oxygen and hydrogen unite to become water, the Forms of oxygen and hydrogen do not become the Form of water; they merely give place to it. The substrate persisting through this change is Matter; it is identical with passive potency, that is, the power of receiving a new perfection. Relatively to this perfection, and insofar as it is only capable of receiving it, Matter is non-being; but it " cannot be absolute nothingness, for it is one of the essential constituents of those undeniable realities, material bodies." [10]

Form, on the other hand, is the perfection lost or acquired in substantial change; it units with the Matter to form the substance, and gives the substance its specific nature. (Form, of course, does not mean merely shape.)

mystic " Richard Jeffries. But it is maintained that such mysticism has its norm in Christian contemplation, and approaches that norm insofar as it conforms to its conditions (Cf. E. I. Watkin, *The Philosophy of Mysticism,* pp. 386-388).

[8] John O'Neill, *Cosmology,* Vol. I, p. 99.

[9] *Ibid.*

[10] *Ibid.,* p. 124. No doubt this remark indicates a basis for the intelligibility of Matter by angels. Cf. present essay, p. 23.

Matter, therefore, cannot exist by itself, without the Form, because there can be no substance without a determinate nature; Matter of itself is wholly indeterminate. For this reason it is called Primordial Matter, to distinguish it from physical matter, i. e., a bodily substance of whatever species, already fully constituted. Matter, then, is neither substance, accident, nor—of course—Form; but it enters, with the Form, into the constitution of substances; and the Scholastics speak of it as an " incomplete substance." Matter cannot be known directly, but only by analogy, and with reference to a Form; because it is partly negative, and because all things are known only insofar as they are determinate: only Forms are intelligible.[11]

According to St. Thomas (on this point opposing Scotus) Matter is the principle of individuation in physical substances: Forms identify, not individuals, but only species. Form then—to use the phraseology of E. I. Watkin—makes an object this sort of thing; Matter makes it this particular thing: Form is the source of *thusness*; Matter, of *thisness*.[12]

Primordial Matter, we remarked, is always distinguished from physical matter. St. Thomas, however, holds that Primordial Matter enters into the composition only of physical bodies; [13] the Franciscan school, on the other hand, with Alexander of Hales, St. Bonaventure, and Duns Scotus, would suggest that all creatures, even spirits, are composed of Matter and Form, and that only God, Who is Pure Act, is pure Form. Scotus' reason is that passive potency is founded in Matter, and that all creatures are partly in potency.[14] The question

[11] I *Contra Gentiles*, 44; O'Neill, *Cosmology*, I, pp. 98-142; Gerrity, *The Theory of Matter and Form and the Theory of Knowledge*, p. 56; Watkin, *A Philosophy of Form*, pp. 3-70; Gilby, *Poetic Experience*, pp. 4, 22, 65.

[12] St. Thomas, *IV Sent.*, XII, q. 1, a. 1; *Tract. de principio individuationis*; *I Cont. Gent.*, 44; II, 100; III, 59; O'Neill, *op. cit.*, I, 162-166; Gerrity, *op. cit.*, p. 99; Watkin, *op. cit.*, pp. 1-2.

[13] I. e., excluding angels and human souls. Cf. St. Thomas, *Summa Theol.* I, q. 50, a. 2; *Q. D. de Anima*, and *de Spiritualibus Creaturis; Opusc.* XV, *De substantiis separatis* (*De Angelis*) 7; *Opusc.* XVI, *De unitate intellectus contra Averroistas.* Cf. also Gilson, *The Philosophy of St. Thomas Aquinas*, p. 175.

[14] *Dictionnaire de Théologie Catholique*, Article " Ame," vol. I; see, in column 1028, references to: Alexander of Hales, *Summa Theologica* II, q. 6, a. 1; St. Bonaventure, *II Sent.*, d. III, q. 1, a. 2; d. XVII, q. 1, a. 2. Cf. Watkin, *A Philosophy of Form*, pp. 43, 64.

then turns on St. Thomas' contention that a pure Form can be in potency.[15]

The theory of Matter and Form provides the elements of the Scholastic theory of knowledge.[16] The theory may be summarized thus: (we follow the doctrine of Suarez, noting where he differs from St. Thomas) Knowledge exists when the thing known becomes, *in some respect*, the knower; i. e., when the mind, by an immanent act, assumes (or, more technically, expresses) the form of the object.[17] There are several stages in the process. Material objects are not proportioned to the intellect; hence Scholastics attribute to the mind a faculty, called " intellectus agens," whose function is to abstract the intelligible Form of the object. This Form, received passively by the mind, is called the " impressed species." This operation is only preliminary to knowledge because in it, as we remarked, the mind remains passive whereas knowledge is an immanent act; and because the impressed species is received not as a Form, but only as a stimulus to action. The mind acts by " expressing " the Form in what is called the " expressed species " or concept.[18]

[15] " Relinquitur ergo quod si spiritualis substantiae materia sit ens actu, quod sit actus vel forma subsistens; sicut et materia corporalium rerum ita dicitur ens in potentia, quia est ipsa potentia formis subjecta." St. Thomas, *Opusc.* XV, 7 [Ed. Piana]; " (Angelus) secundum hoc est in potentia quod esse non habet a seipso." *Q. D. de Ver.*, VIII, 6, ad 4.

[16] For a summary of the process of knowledge according to modern Thomistic philosophy, see Phillips, *Modern Thomistic Philosophy*, I, p. 271, and Smith, " The Concept in St. Thomas " (*Modern Schoolman*, XV, 3). For a detailed study of the relations between the doctrine of Matter and Form and the theory of knowledge, see Gerrity, *The Theory of Matter and Form and the Theory of Knowledge.*

[17] St. Thomas, *Summa Theol.* I, q. 87, a. 1, ad 3um; q. 88, a. 1, ad 2um; *I Cont. Gent.*, 44; *Q. D. de Ver.*, VIII, 6; *Opusc.*, XV, 7; Gilson, *The Philosophy of St. Thomas Aquinas*, p. 267; Sertillanges, *The Foundations of Thomistic Philosophy*, pp. 15-16; Gerrity, *op. cit.*, pp. 110, 113; Gilby, *op. cit.*, p. 21.

According to St. Thomas the mind must both actively assume *and* express the Form of the object. Cf. note 18.

[18] St. Thomas, however, distinguishes expressed species and concept: the species is that *by which* we know; the concept, that *in which* we know: the mind first actively assumes the form of the object (expressed species), then expresses it (concept). St. Thomas' formula, " cognoscendo exprimit," is the reverse of Suarez', " exprimendo cognoscit." Suarez identifies expressed species and concept: for him, the act of assuming the form is likewise the complete expression (*Dictionnaire de Théologie Catholique*, Article " Intuitive (Vision)," vol. VII, column 2379—referring to Suarez, *Metaph.*, disp. VIII, sect. IV, n. 2; Farges, *Mystical Phenomena*, p. 597).

The difficulty of visualizing immanent [19] as opposed to transitive action partly accounts for the obscurity of this stage of the process. The concept is not to be thought of as an object of knowledge; an image, as it were, which the mind sets up in lieu of the external object; or as a mirror in which the mind sees the object indirectly. The mind does not know the concept: the action of conceiving *is* knowledge.[20] The concept, or expressed species, is the Form of the object existing by an act of the knower (i. e., intentionally) whereas outside the knower it exists by its own act (i. e., substantially).[21] In forming the concept the mind simply actuates this Form; so that knowledge is at the same time an immanent act of the mind and an act of the object, which, through the intentional Form, is in a certain respect identified with the mind.

1) Now to return to the first part of our question: can aesthetic knowledge be mysticism, that is, intuitive vision, in the strict sense? Let us recall the definition of *intuition*: a mode of apprehension excluding analogy, abstraction and reasoning. Now it is evident that, for the purposes of this discussion, the significant note of intuitive knowledge is its exclusion of abstraction. For our ordinary knowledge of, let us say, the facts of history excludes analogy; our ordinary knowledge of first principles excludes reasoning. What alone divides intuition, or immediate knowledge, from all ordinary knowledge is the absence of abstraction. Remember, secondly, that *vision* is defined as complete knowledge, embracing not only the Form of the object, but its principle of individuation.

In the light, then, of the Scholastic principles of knowledge, we can see that there is an intrinsic connection between the abstractness—the mediacy—of our perception of bodily objects,

Where not otherwise noted, the word "concept" is used in this essay as synonomous with "expressed species."

[19] St. Thomas, *Q. D. de Ver.*, VIII, 6, "Respondeo dicendum. . . ."

[20] This is the "exprimendo cognoscit" of Suarez (cf. note 18). The Thomist must say that the act of conceiving *completes* knowledge. Cf. St. Thomas, *II Cont. Gent.*, 75; IV, 11; Gerrity, *op. cit.*, p. 113.

[21] St. Thomas, *IV Cont. Gent.*, 11; *Q. D. de Ver.*, III, 1; Gilson, *The Philosophy of St. Thomas Aquinas*, p. 269.

and its lack of completeness. All bodies are composed partly of Matter which is unintelligible; the mind must abstract the intelligible part of objects simply because the whole object cannot be known.[22] For us, then, whose knowledge begins with the senses, the one quality of knowledge depends on the other: knowledge can be intuitive or immediate only when it can comprehend the whole object—the *thing*, with its individuality as well as its Form; and ordinary knowledge must be abstract because it must be partial[23]

We note that this objection does not apply to the vision of God, since God, being pure Form, is wholly intelligible.[24] St. Thomas would say that angels and disembodied souls can likewise be the object of intuitive and complete knowledge for the

[22] *Summa Theol.*, I, q. 56, a. 1, ad 2um; *II Cont. Gent.*, 75.

[23] But does not St. Thomas contradict this principle in declaring that our consciousness of self is immediate? (*Q. D. de Ver.*, X, 8.)

In answer it may be pointed out that St. Thomas is not speaking of actual knowledge but only of what may perhaps be considered the equivalent of habitual knowledge. "Sed quantum ad cognitionem habitualem, sic dico quod anima per essentiam suam se videt, id est ex hoc ipso quod essentia sua est sibi praesens, est potens exire in actum cognitionis sui ipsius; sicut aliquis ex hoc quod habet alicujus scientiae habitum, ex ipsa praesentia habitus est potens percipere illa quae subsunt illi habitui. Ad hoc autem quod percipiat anima se esse, et quid in se ipsa agatur, attendat, non requiritur aliquis habitus; sed ad hoc sufficit sola essentia animae, quae menti est praesens. . . ." But the soul knows itself *actually* only through its own acts: "Quantum igitur ad actualem cognitionem, qua aliquis considerat se in actu animam habere; sic dico, quod anima cognoscitur per actus suos" (*Q. D. de Ver.*, X, 8, 11th consideration). To know its own acts, and thus to pass from potential to actual knowledge, the mind must have recourse to abstraction: ". . . quamvis anima materiae conjungatur ut forma ejus, non tamen materiae subditur ut materialis reddatur; ac per hoc non fit intelligibilis in actu, sed in potentia tantum per abstractionem a materia" (*Q. D. de Ver.*, X, 8, ad 4. Cf. *Summa Theol.*, I, q. 87, aa. 1, 2).

It is true, besides, that the connection between the immediacy and wholeness of knowledge is verified only in the conditions of human life. According to St. Thomas, angels know created objects through species infused by God, not abstracted from the objects (*Q. D. de Ver.*, VIII, 9), so that even their knowledge of universals is intuitive.

[24] We are regarding only the metaphysical possibility, and do not consider the conditions which would make such knowledge psychologically possible to created minds. Actually, according to Catholic theology, it is possible only through elevation of the soul by the "lumen gloriae." Psychologically, in other words, the vision of God is supernatural.

same reason.[25] This exception to the general rule would seem to have no practical bearing on aesthetic psychology; moreover, the exception is not admitted, as we have seen, by those who follow the thought of Scotus and St. Bonaventure. According to their opinion, which is at least probable, it is only in God, Who is perfect Being, that there is found no repugnance to being an object of perfect knowledge.

The objection then to the hypothesis that poetic knowledge may be truly immediate and whole—that is mystical in the full sense—has a metaphysical basis; resting on the nature of things, not simply of the mind.[26] Both the abstractness and the incompleteness of our knowledge of created objects derive from their material composition: the Form of the objects is abstracted from the Matter; they cannot be known in their wholeness and individuality because Matter, which is a part of their being and the source of their individuality, is unintelligible.

But we cannot say that the difficulty amounts to an absolute impossibility, for as St. Thomas shows, angels—by connatural power—know created objects as singulars, and not merely through their specific Forms.[27] Whole and singular knowledge of created things is therefore metaphysically possible.[28]

[25] *Summa Theol.*, I, q. 56, a. 1, ad 2um; *Opusc.* XV, 7.

[26] We do not say such knowledge is metaphysically impossible, as will be explained in the next paragraph.

[27] The angel "has intelligible species through its likeness to the first intelligible species, *viz.* the divine intellect, which is not abstracted from things, but productive of them. Now, it is productive not merely of the form but also of the matter which is the principle of individuality. Wherefore the species of the intellect of a separate substance (angel) represent the whole thing, not only the principles of its species, but also the principles of its individuality. Consequently we must not deny separate substances the knowledge of singulars, although our intellect is unable to know singulars" (*II Cont. Gent.*, 100; cf. *Q. D. de Ver.*, VIII, 11).

It is true that God, also, knows bodily things, not only in their universal Forms, but as individuals, which means that He knows them wholly, since their principle of individuality is Matter. (*Summa Theol.*, I, q. 14, a. 11, ad 1um; q. 56, a. 1, ad 2um; q. 86, a. 1; *I Cont. Gent.*, 65; Phillips, *op. cit.*, I, p. 263.) But this knowledge is accounted for by the fact that He knows creatures, not directly, but only as they exist eminently in His own Essence (*Summa Theol.*, I, q. 14, a. 11, ad 1um; *I Cont. Gent.*, 49, 53, 57, 65).

[28] Doubtless the modicum of being which St. Thomas attributes to Matter (see note 10, above) furnishes some basis for natural intelligibility.

However, it would still seem relatively impossible; impossible for us, that is, whose knowledge is not infused but derived from created objects. Psychologically, at least, and as a mode of experience reserved, according to St. Thomas, for angelic minds, its connection with art seems highly improbable. Nor is the analogy between the effects of art and of contemplation so close as to overcome this improbability.[29]

2) Aesthetic experience, then, is not, in the strict sense, immediate knowledge of a whole and singular thing. But we have noted that even the mystical experience of the saints does not (according to common opinion) fulfill this complete sense of the word. Father Farges would not except even such a vision as that of St. Augustine at Ostia,[30] from the general rule that contemplation on earth is inferior to perfect vision, even though

[29] It should be remarked that the use of the word, immediate, of intuitive knowledge, is apt to be misleading. To define it as meaning "without abstraction, analogy, or reasoning," does not entirely rid the word of connotations at variance with this definition. We have continually to remind ourselves that the concept, which we associate with mediate knowledge, is not a medium in the sense of a substitute known in lieu of the object, or of a lens through which the object is seen but by which it is at the same time insulated from the mind. A more apt analogy would be that the concept is—at least for Suarez—like a part seen for the whole: actually, for him, the concept *is* the Form of the object, although existing by an "intentional" act, not by a "substantial" act. Pursuing this limitation of the word's meaning, we may say that there is a sense in which even the Beatific Vision is not immediate. (It is of course entirely accurate to speak of immediate Vision, if we mean that the medium removed is analogy.) In this Vision, according to Thomists as well as Suaresians, the Divine Essence will take the place of both impressed and expressed species (*Dict. de Théol. Catholique,* vol. VII, column 2378-9, article "Intuitive (Vision)"; cf. St. Thomas, *III Cont. Gent.,* 51). That is, since God is Pure Form, He can be present to the mind without abstraction: His presence as an object of knowledge will be substantial and not merely intentional. But so far as the mind which apprehends Him is concerned, the ordinary structure of knowledge will—in the Suaresian theory—still be verified: the mind will still require to be impressed by its object; and it will still concur, through the mysterious elevation of the soul to a share in the divine Life, in the "expression" of that object (See ref. above to *Dict. de Théol. Catholique*): the act by which God constitutes Himself substantially present as as object of knowledge, will likewise be an immanent act of the created soul. (The intellect is the principal cause of the Beatific Vision. See quotation from Billuart in *Dict. de Théol. Catholique,* vol. VII, column 2376.)

[30] *Confessions,* IX, 10.

somehow superior to ordinary knowledge.[31] It remains to consider then whether the likeness between poetic knowledge and this less absolute form of mysticism may be closer than analogy; whether the psychological structure of art is truly mystical in the sense in which religious contemplation on earth is mystical. The question is distinct from the foregoing, and, as the psychology of such contemplation is obscure, the solution lies in the province of theology rather than philosophy.

The following contrasts between religious and poetic contemplation suggest that their nature is basically different: [32]

a) The motive of religious contemplation is charity; it is loved not for its own sake but for God's.[33] Poetic contemplation, of course, like any human activity, may be referred to a motive of charity: the artist may dedicate his work to the glory of God. But very often he does not. And even where the motive of charity is present, it does not exclude others; so that as a rule poetic contemplation is loved partly for its own sake: the motive is pleasure, though a sublime pleasure. In token of this difference it should be noted that the saints never aim at mystical experience directly, whereas the fostering of poetic experience is of necessity a chief preoccupation of the poet.

b) Religious contemplation occurs as a kind of accidental flower in the progress of a definite and deliberate ascetical régime, whose immediate aim is the perfecting of the soul in the moral and supernatural virtues. The process in which poetic experience occurs has not this aim; nor is the experience connected with any definite religious discipline.

[31] Farges, *Mystical Phenomena*, p. 601; pp. 272-8, esp. p. 278, note 1; pp. 285-7. Father Farges considers that the experience of the contemplative saints involves impressed species but not expressed species. He would except only the experience related by St. Paul in II Cor. 12. The difficulty, however—and one which Suarez notes (cf. Fr. Farges, *op. cit.*, p. 278, note 1)—is to explain how such knowledge could be an immanent act of the knower.

Cf. St. Thomas, *Q. D. de Ver.*, XVIII, 1.

[32] Cf. Watkin, *The Philosophy of Mysticism*, pp. 248-250; Brémond, *Prayer and Poetry*, pp. 187-200; White, *The Metaphysical Poets*, pp. 11-27.

[33] Maritain, *Prayer and Intelligence*, p. 21; St. Francis de Sales, *Traité de l'amour de Dieu* (Annecy), I, p. 68 (quoted by Brémond, *op. cit.*, p. 11).

c) In religious contemplation the thought of God is not only central, but pervasive and all consuming. Comparatively little poetry, on the contrary, is concerned directly with God; and almost any beautiful object may suffice to inspire and absorb the contemplative faculty of the poet.[34]

d) The joy of religious contemplation gives a happiness to which no other activity nor created object can add. The effect of this joy is indeed an increased zeal in external good works, but the contemplative leaves his prayer only to fulfill the precept of charity, not to seek further happiness. Almost the first effect of poetic contemplation, on the other hand, is to arouse the desire for expression; the poet has to communicate his experience, with a need the keener and more imperative as the experience is more intense.[35, 36]

e) Finally, the resemblance between mystical and poetic experience can—it is the contention of this essay—be explained more simply and discreetly than by supposing them to be identical in kind. But this anticipates what we shall say later.

3) There remains a final consideration. Over and above any theological or philosophical objection, we must deprecate the use of a phraseology by aesthetic philosophers, which can only further the deterioration of the word, Mysticism. A verbal affinity of Mystical with Mystery, Mystify, and even Misty, has led to the application of the word to states and

[34] This difference is at the basis of Watkin's remark: "We might almost call art a natural religion of immanence, prelude and ante-chamber of the supernatural religion of transcendence." (*Philosophy of Form,* p. 348.) The poet, that is to say, loves the reflections of the divine beauty in creatures. The mystic seeks the divine beauty at its source, above nature and all creatures.

[35] T. S. Eliot registers a doubt concerning this characteristic of poetic experience, but the grounds of his doubt seem not clear (*The Use of Poetry,* p. 130).

[36] The difference which the action of grace might make in religious contemplation is not cited here, as it is not susceptible of direct demonstration. Moreover, as Father Gilby points out (*op. cit.,* p. 44), there is no certain reason why grace might not operate in poetic experience as in any other function of mind or will, since all our actions are the actions of souls elevated to the life of grace, and have, moreover, some connection with the goal of that life. Cf. Watkin, *Philosophy of Mysticism,* pp. 249-250.

processes which have nothing in common except their vagueness. For example, the adjective qualifies the proceedings of occult science; it is used to describe utterances which are merely religious, or merely metaphysical, or—sometimes—merely indefinite. Even in theology it is not always applied univocally; having its proper and defined meaning in the treatise on contemplation; but an equivocal sense when it is used in such phrases as " the Mystical Body of Christ," or " the mystical sacrifice of the Mass."

There is a special temptation to use such undiscerning language about art, because of the real analogy between art and mysticism. It is this analogy which partly justifies such a statement as that of Schiller:

> The poet is the only genuine human being, and the best philosopher is only a caricature alongside him;

or the more modest claim of Huysmans:

> *L'Art est la seule chose propre après la sainteté.*

But it accounts also for less defensible statements. Thus, Matthew Arnold wrote:

> More and more mankind will discover that we have to turn to poetry to interpret life for us, to console us, to sustain us. Without poetry, our science will appear incomplete; and most of what now passes with us for religion and philosophy will be replaced by poetry.[37]

And here are a few modern pronouncements:

> The demand which the human soul makes is for satisfaction here and now; men's eyes must *see* their salvation. It is this visible salvation that great poetry does offer.[38]

> Poetry is capable of saving us.[39]

[37] Quoted by Martin Turnell in *Poetry and Crisis,* p. 4.

[38] Middleton Murry, quoted by Martin Turnell in *Poetry and Crisis,* p. 5.

[39] I. A. Richards, quoted by T. S. Eliot in *The Use of Poetry and the Use of Criticism,* p. 116.

. . . the serious modern artist . . . addresses himself to that reader to whom the creative records of the human spirit are a religion. . . . the enlightened and seeking modern reader has no "revealed Providence" to fall back on . . . Scripture . . . having become literature, it was necessary for literature to become scripture.[40]

It is clear how such assertions trace back to the notion of poetry as a kind of mysticism; the idea, in short, is that the mystical sensitivity of the poet gives him a deeper and more subtle contact with reality than reason does; a contact which fits him to be the prophet and interpreter of the divine to ordinary men.[41]

Now art cannot become involved in such pretensions without ending in humiliation. We have seen, as a matter of historical fact, that it is only a step from the exalting of art because it seems above reason, to the cultivation of an art which is merely irrational. The false prophecies of art bring in Surrealism.[42] And where common sense will not follow art into such esoteric folly, it repays her presumption simply by contempt and neglect.

To exaggerate the mystical element in art is bad for art; it is bad also for mysticism. We would do well to return to strict theological notions.[43] According to Catholic doctrine, let us recall, the mystical life—that is, contemplation considered not merely on its intellectual side, but as an integral process proceeding from charity and fruitful in good works—is the highest form of life.[44] The contemplative saints are the heroes of that life. So there is reason to guard the dignity of the word, Mysticism. The confusion that now threatens it of course, does not harm the mystics; but it harms us who need the brilliance

[40] Ludwig Lewisohn, *Expression in America*, pp. x, xiii.

[41] And so we see the force of Maritain's warning: "Prayer, sanctity, mystical experience—poetry, even 'pure poetry,' is none of these things. But it is their most beautiful and dangerous natural symbol" (The *Degrees of Knowledge*, p. 347).

[42] Cf. Maritain, *Art and Scholasticism*, pp. 114-117.

[43] For a compedium of mystical theology see Tanquerey, *The Spiritual Life*, chapters dealing with the Unitive Way. For a fuller treatment, see Pourrat, *Christian Spirituality*.

[44] Maritain, Jacques and Raïssa, *Prayer and Intelligence*, pp. 29-32, with references to St. Augustine and St. Thomas.

and fixity of all great human stars and guides. It is only too natural for Goethe to exclaim: "Mysticism: unripe philosophy, unripe poetry!" But his loss, if measured by the value which Catholic theology places upon mysticism, is very great, for he has lost the mystics. Unhappily we are not even disposed to appreciate the loss; it is only one result of a habit of mind affecting all our estimates of spiritual matters; an impatience of the effort needed to distinguish the genuine from the spurious, coupled with a sceptical inhibition of the instinct for reverence, which have made us incapable of recognizing greatness and heroism when we see them.

* * *

We have contended in the foregoing pages that poetic experience does not satisfy the strict definition of mysticism: it is not intuitive vision: immediate knowledge of a whole and singular thing. Neither, we maintained, is aesthetic psychology the same as that observed in the mystical saints. We deprecated, finally, too close a comparison between mystical and poetic experience, as tending to encourage the common habit of using the word, Mysticism, when we mean something else.

There remains, then, the analogy between art and mysticism. This analogy is—we shall try to show—one of the principal sources of the value of art and it provides a key to the nature of beauty. But the psychology of the artist and the mystic do not come closer than analogy: they are not the same thing.

III. The Theory

1) To begin with a mere statement: Beauty is the special quality of concentrated truth. The poet's experience therefore is the perception of truth in this form; and his poem is the medium by which he conveys his perception to other minds.

* * *

Our point of departure is the mind's discontent with ordinary knowledge. The *kind* of knowledge is unsatisfactory: we want

intuitive and complete knowledge; we get only mediate and partial knowledge. But this is not the ultimate source of discontent: probably we can have a perfect *kind* of knowledge only when the *object* is perfect. The mind longs for contact with simple and universal truth—that is to say, the First Truth, God; but it knows only broken lights of Him. Once arrived at the vision of God, it will be happy in a new and perfect *kind* of knowledge; here—*in statu viae*—knowledge remains imperfect alike in kind and object.

Here we must pause to note a parenthesis which St. Thomas and all theologians are careful to insert. There cannot be a natural need for a supernatural object. If nature has planted an absolute desire in man, then its fulfillment is a part of nature, not beyond it. Now we have remarked that in man there is a desire to see the universal and first truth, which is God. St. Thomas says, "For perfect happiness it is required that the intellect should attain to know the *essence* of the First Cause." [45] On the other hand, this vision of the divine Essence is—as St. Thomas and all Catholic theologians insist—absolutely supernatural: it is not only above the mind's nature and powers,[46] but—in a real sense—above its desires.[47] We can only outline here the distinctions by which theologians reconcile the apparent contradiction; noting, merely, that the technical words stand for real distinctions of most fundamental importance.

Man's desire to see all truth, as it is visible in God's Essence, is neither innate (like the desire to live), nor absolute, nor necessary. It is elicited: that is, consequent on knowledge of its object.[48] It is conditional: that is, depending on ability to encompass the desire: "I should like to reach this vision, *if* God gives me the power." [49] And (according to the common

[45] *Summa Theol.*, I-II, q. 3, a. 8; cf. *III Cont. Gent.*, 25, 37, 63, and in general, *ibid.*, 26-48.

[46] *III Cont. Gent.*, 53; 55, ad 4.

[47] *Summa Theol.*, I-II, q. 114, a. 2; cf. *III Cont. Gent.*, 48.

[48] *Summa Theol.*, I, q. 12, a. 1; *Q. D., de Ver.*, XXII, 7; Garrigou-Lagrange, *De Revelatione*, pp. 204, 208.

[49] *Summa Theol.*, I, q. 23, a. 1; q. 62, a. 1, 2; I-II, q. 114, a. 2. Garrigou-Lagrange, *op. cit.*, pp. 205, 208.

opinion) it is free: man must naturally will to be happy; but need not will this particular object of happiness.[50] And therefore, since the desire is elicited, conditional and free, it is not *efficacious*: that is, it does not *require* fulfillment.[51] And theologians add that, as regards its object, the desire is not formally supernatural; objectively—" materially "—the object is supernatural, since God is in fact the Holy Trinity; but the natural desire of the mind regards God only as the author of nature.[52] It should be added finally that this inefficacious natural desire for the vision of God becomes, through revelation and grace, not only efficacious but much more clear and compelling.[53]

The state of the soul in the possession of its full and final object is contemplation (intuitive vision). The felicity of this state has a double aspect. Because the mind will be in presence of its complete object, it will be happy in the supreme activity of all its powers. But because there is no farther to go to seek any object, the mind will rest, as in its home.

Such happiness—need we remark—is deferred. But there are earthly experiences which seem to give a foretaste of it.[54] And among these, " poetic experience "—the enjoyment of works of art, or the artist's vision itself—has a notable place.

Read (to take only literary examples) the passage from *Job* (III, 13), " Then had I been at rest with kings and counsellors of the earth, who built desolate places for themselves . . ." Or Dante, " *Qui sarai tu poco tempo silvano* . . ." (Purg. XXXII, 100). Or Vaughan: " They are all gone into the world of light . . ." Or Charlotte Mew's poem, " I have been through the gates . . ." Or the last two stanzas of T. S. Eliot's *Sweeney Among the Nightingales.*

The brevity of these passages brings into relief the quality

[50] Garrigou-Lagrange, *op. cit.*, p. 208.

[51] *Ibid.*, p. 23, note 5.

[52] *Ibid.*, p. 210.

[53] For a treatment of the entire question, see also Edmund Brisbois: " Human Desire and the Vision of God in St. Thomas," in *The Modern Schoolman*, XVI, 1, 2: Nov. 1938, Jan. 1939.

[54] St. Thomas, *III Cont. Gent.* 63.

which they share with all great poetry: the effect is heightened because it is compressed and decisive. And those who are sensitive to poetry will note here a resemblance to both the marks of contemplation. There is the sense of exalted and intense mental activity. On the other hand, there is the effect of finality: for a moment the ever-journeying mind seems to pause; not satisfied, indeed, but forgetting for a moment its immense desires.

Now does this resemblance between contemplation and poetic experience suggest that their objects may be similar, however remotely? Does poetry—and every art—produce some hint of perfection and felicity in the mind, because the object of poetry approaches, however remotely, the perfect truth of contemplative knowledge? This is to ask, in short, does poetry convey more truth than ordinary expression?

Testing the hypothesis by examples, we get at first sight a doubtful result:

> God is man's last end; therefore man can be happy only in the possession of God.

This sentence, considering the subject, is as little beautiful as can be. Now for contrast take the familiar line of St. Augustine:

> Thou hast made us for Thyself, and our hearts are restless till they rest in Thee.

Surely his line is more beautiful than the other; but is it more true? So far as literal theology goes, the two sentences seem identical in meaning, and even in accuracy: the truth is merely absolute in both. Therefore, if the difference lies in the sphere of meaning at all, it must be found by analysis of what St. Augustine's words imply rather than what they express. We can chart the analysis thus:

> *Thou, Thyself*: Words of personal address, suggesting the notion of God as Father, Brother, Friend.
>
> *Us*: Again a personal word; more suggestive and vital than *man*.
>
> *Made*: We are creatures, dependent and small.

Hearts: Implies the vivid humanity of our desires and need for God; and brings in a faint reminder of all the tenderness and conflict, happiness and sorrow, that the heart causes. It is a word full of associations.

Restless: Again, a word full of the echoes of life. And it has the eloquence of understatement; since the feeling of the heart is often much deeper than this word signifies.

Rest: A homelier and more touching word than, e. g., *peace*. It brings in the body's weariness; vaguely, it reflects pictures of earthly peace; of evening, of home, of toil finished, of quiet and the presence of friends.

We might note in addition the balance of the two clauses, not only in meaning, but in sound and construction; a balance which is echoed in the contrast between *restless* and *rest*. The balance suggests fulfillment and peace.

The soft *s*'s (a feature, of course, only of the translation) convey the same suggestion.

Obviously this analysis is only partial and superficial; a more thorough analysis is unnecessary for our purpose, which is to give an example; and a complete analysis would be impossible, for we cannot track all the associations of thought by which the mind responds to images, melodies and forms. But it is sufficiently clear that everything which St. Augustine's line conveys to the mind, except the bare theological fact, is found only in his line and not in the other.

Now let us assume that the sentence of St. Augustine is typical of poetry—that is, of beautiful words, whether in the formal mold of poetry or not—and that an analysis of any poetry would give a similar result. And let us agree for the moment to say that what St. Augustine conveys to us by implication is a kind of truth. We will conclude, then, by surmising that poetry conveys, perhaps not more truth, but more *truths* than ordinary expression.[55]

[55] Cf. Maritain, *Art and Scholasticism*, p. 57. We should add that the analysis is to some extent subjective, in the sense that the connotations of words vary according to the experience and sensibility of the reader. This does not affect the force of the analysis, however; our concern is merely to show that many truths are connoted by poetical expression, though they may not be exactly the same truths for each reader.

2) Obviously there are several points of philosophy and psychology supposed in this analysis of beauty.

a) The first concerns the distinction between ontological and logical truth. Ontological truth is one of the transcendental attributes; i. e., it transcends all distinctions and applies to everything which has Being. It may be defined as Being considered in its relation to the mind. Everything which exists is ontologically true, or, as we also say, an ontological truth. In this sense, a man is true, not in the measure of his speech, but of his existence; a book is true, not because it conveys correct judgments, but because the book *is*. The expression of an ontological truth is a simple noun by which we designate an essence.

Logical truth, on the other hand, is the relation of agreement between a judgment about things and their reality. Or it may signify the knowledge conveyed by a true judgment. A book is logically true, then, only if its meaning accords with facts; a man is true only if what he says is verified in reality. The sentence, " Dante was a Florentine," expresses a logical truth. And we note that this kind of truth is not conveyed by a simple noun, but demands a subject and predicate connected by a verb.

Now God is, in Himself, ontologically true. His truth is in the measure of His infinite Being. It is only by analogy that He can be considered, in Himself, as logically true. What form of words, for example, might be conceived as expressing the knowledge to be gained in the Beatific Vision? " God is good? " " God is the Creator? " Or simply, " God is . . . God? " We may use this last form of words, indeed, because our minds yet inhabit the realm of logical truth, but it is with a sense of failure. The repetition is a halt of the mind, and implies its defeat. The words of God to Moses, " I am who am," suggest the same chastening failure—not of Omnipotence, evidently, but of human words—to encompass the mystery of Being. We rightly feel that the sentence is not logical: it is the effort—so to speak—to cast in logical form a truth which is ontological.

The truth, then, which the mind fundamentally desires, and toward which it is bound on every path of inquiry and judgment, is ontological: truth as an aspect of Being; truth as it exists in God. If poetry, then, gives some faint anticipation of the mind's full happiness, we shall not be surprised to find that the truth of poetry can be identified as mainly ontological. Evidently the analysis of the sentence of St. Augustine yielded this result. God as a Father; ourselves the work of His hands, yet happy only in His intimate love; our dream of rest sharpening the daily sense of exile—we may impose on these thoughts the mold of logic, but evidently they suffice as they are. The sentence form adds nothing, because they naturally invite our contemplation, not our judgment. They are not important to us as items of information, but as things.

What, then, is the connection between ontological and logical truth? What part has logical truth in the life of the mind? Let us note, first, that the parts even of a logical truth are ontological truths. Each term of a sentence is, or may be reduced to, a noun; and is true not as a judgment but only as signifying something existing. Thus, in the sentence, " John is human," the name John stands for " This particular being, John," and the adjective " human " may be rendered " a man." Moreover, every verb may be reduced to " is " or " are "; its function is to unite the two nouns by asserting their identity. For example, the sentence, " Dante wrote the Divine Comedy," is logically equivalent to, " The man Dante is the man who wrote the Divine Comedy." Now we recall that the mind's destiny is to possess ontological truth in its fullness. When the mind perceives the idea conveyed in the word " Dante " or " author of the Divine Comedy," it possesses truth, ontological but partial. By an inner necessity it is driven to enlarge this truth, to develop an object more nearly fulfilling its capacity to know. The truth *Dante* is " made larger " by its union with the truth *author of the Divine Comedy*. Each by itself is unsatisfying; united, they are still immeasurably far from an object of complete satisfaction; but in a sense they approach it. Their combination is a step toward full and final knowledge, even

though no more than a step. And a step—an inconclusive approach—is all that the mind is capable of within the boundaries of nature.

The combining, then, of two ontological truths in a third and greater truth is an epitome of the mind's activity in its ascent from partial truth to the vision of God. So far as the intellect is concerned, the logical form of expression—the sentence—might be taken as a symbol of the *status viae*: the state of imperfect and aspiring knowledge.[56]

But we must remember that the impulse which produces logical activity remains at bottom ontological: the need for truth as Being; the desire for simple contemplation. The character of this fundamental desire will persist through all the activity which it prompts; and will color the most remote and complicated operations of judgment and reasoning. Even where the structure of expression would seem to define a logical intention in the mind, this deeper and simpler motive will betray itself. Thus, when Wordsworth says, " It is a beauteous evening, calm and free . . . ," neither he nor his readers pause over the fact that the evening *is* calm and free; our delight is merely in the calm and free evening.[57] The key, then, to the deepest significance of all our thought and art is this original, " ontological " desire, which sends us forth on such devious ways of logical thought, and leads us home by them.

b) The second point assumed in the analysis of beauty is that man is a psychological hierarchy; in the sense that his mind not only dominates but shares in the motions of all his other faculties. Images, therefore—the perceptions of the senses—affect not only his imagination but his mind. Ultimately he responds not merely to their physical and sensuous qualities but to their meaning.

[56] The beginning of this process of combination can be observed in the awakening activity of the minds of children. The early transition from delight in mere words and single thoughts, to a preoccupation with the making of sentences, reflects something more fundamental than increasing mental ability. Rather, it attests an initial experience of the limits of created objects, the first stage of the mind in its great pilgrimage to the summit of truth.

[57] Cf. McCarron, *Realization*, p. 27.

It is assumed also that this latter response is by far the more powerful and important of the two. No demonstration, perhaps, can place this principle beyond doubt; but there are reasons which may be considered to justify a decided opinion. The fact that the imagination of animals seems so much less vehement than that of men, would indicate that the sensuous qualities of images have little power by themselves. Moreover, the power of images in the human mind may be adequately accounted for by the intellectual content implied in them.

We are apt to dissociate images from meaning because the thought they convey is so vague.[58] But it is this very vagueness which permits them to be so rich in thought. And herein lies the special value of imagination in art. A sentence can bring two ideas into unity; whereas an image, by connotation and suggestion can focus a hundred—not clear, indeed, and distinct, like logical ideas; yet winning to their mark, and leaving their subconscious effect on the highest centers of the mind.

Aesthetic emotion, then, generally associated with the imagination, is in reality the response of the mind—and of all the faculties in sympathy—to an image whose sensuous qualities are richly charged with meaning.

c) The third point supposed is the existence of the unconscious mind—whether or not we discern, with Freud, a part of mental life which is actively inhibited: the "unconscious-repressed"; and a part which is merely latent, or "preconscious."[59]

It is obvious from the analysis of any poem that a work at once so complex and so unified cannot be entirely deliberate. What agent is at work? The prolongation of deliberate activity by mental habit could account for the presence of multifarious elements in the mind; it could not account for their organization.

". . . Inspiration," says Abbé Brémond,[60] ". . . has no

[58] Observe that the image is not vague as an object of sense, but of intellect. The senses and imagination apprehend it most distinctly, as the solid and bright mirror of indistinct thoughts.

[59] See quotation from Freud in *Form in Modern Poetry*, by Herbert Read, p. 12.

[60] Brémond, *Prayer and Poetry*, p. 83.

meaning unless a mystical character is attached to poetry." Might we not find a meaning for it in the unpredictable activity of the unconscious? Before we postulate a further mystery, we should be satisfied that the ordinary processes of thought are no longer mysterious; and it should be established that the normal working of Providence in the depths of the mind is less intimate and sacred, in itself, than more manifest forms of inspiration.

One may still insist that the phenomenon of poetry demands a special cause, something more exceptional than the sources of normal thought. But why explain inspiration by mysticism? Inspiration itself is an explanation.

3) We can see, then, that a necessary condition for the production of any work of art is a certain freedom from reflection; the work must be confided partly to the spontaneous guidance of the unconscious mind: there is an opposition, in short, between reflection and inspiration. Yet we have suggested that the difference between the poetical and the lower exercise of the mind is only one of degree; marking two phases of an impulse whose fundamental nature and direction are the same. And we may complete the idea by noting that the reflective process itself, though so apt to be exaggerated and to impede the productive activity of the poet, is really a witness to the innate desire of the mind to see everything whole, to understand all its aspects, to place it in its relations with the Infinite, and to see the Eternal and the Divine as the environment of every single and limited object. Logic, that is, no less than poetry bespeaks the presence of the contemplative faculty, trying to build its object around the small daily situations and objects. The singularity and joy of art is only that this elaborate process is performed as though it were simple and direct, and the result embodied in a compendious shining form; but it is not a new process. It might be accurate, indeed, to say that intuition is only unconscious reflection.

As intuition, then, carries the poet's mind as if on wings to the mark where reflection goes with toil; and as the object of the poet's vision is the same as that which logic composes by

accretion; so it may be said that every work of art is a summary of the ordinary progress of the soul toward union with God by contemplation. It begins by the senses, and proceeds upward in steps from image to image, and from perception to perception. Its progress is only faster and happier than that of ordinary reason. The poet's vision is simply a sublime, swift, perfect form of what every human being does whenever he thinks.

4) Concerning the theory of beauty as a quality of concentrated truth, one point demands further emphasis; and this is the concentration.

Obviously the analysis of St. Augustine's sentence was less beautiful than the sentence itself. Nor could it be supposed that even if a complete analysis were possible, its beauty would equal that of the single line. Rather, the beauty would dissipate itself in proportion as the analysis became more diffuse.

It is not sufficient for beauty, then, that a work of art should be richly charged with truth. The truth must be brought to a focus, and strike on the mind as a simple and luminous unity. Suppose we figure the truths of ordinary knowledge as a sort of daylight, general and diffuse. Poetry, then, would be like the lense which gathers this light to a point.

Note how literally this account of poetry corresponds with the classic definitions of beauty, Plato's *splendor veri*, and St. Augustine's *splendor ordinis*. Order is a kind of unification, a focusing. And where you have rays of light focused on one point, you have a *splendor*.[61]

5) The foregoing analysis would explain another phenomenon of beauty. If we note, with Father Gilby, that in poetic experience we have a sense of apprehending, not merely abstract and universal forms of things, but the things themselves, whole and individual; we might account for this impression by saying

[61] The definitions of Plato and St. Augustine are practically equivalent, since *splendor ordinis* may be rendered *splendor veri ordinati*. We observe that the definition of St. Thomas, *quod visum placet*, is not concerned, like these, with the objective essence—the ontology—of beauty, but with its psychology. But he also called beauty *splendor formae*.

that a work of art focuses a great many aspects in a single point; revealing so many sides of an object at once, that we are tempted to say, " I see the thing."

6) We may carry the theory to a phenomenon somewhat farther afield, though the application is less clear. There are certain types of experience which resemble the experience of poetry in their subjective elements, yet seem objectively quite different. The exaltation of dangerous mountain climbing, for example, or the thrill which certain temperaments find in deliberate encounters with other forms of danger, is strangely similar to the delight given by the arts. The pleasure seems too complete to be attributed to mere sensory stimulation or satisfaction; on the other hand, thought content seems almost wholly absent.

It may be suggested—if there is any call to extend the theory to this phenomenon—that thought content is not *wholly* absent: there is some relation between what the mind perceives of its surroundings and the " ecstatic " experience which occurs there; moreover, the subconscious repercussions of this perception may be all the deeper and more extensive for being obscure.

We should remember that poetry itself depends for its effect not so much on the presentation of new data as on the capacity to arouse associations which are already stored and organized in the mind; not so much on the knowledge which it gives, as on the knowledge which it awakes. Poetic experience is largely the focusing of remembered experience.

The following supposition, then, is possible: The thrill of the mountain-climber (of the aviator, the soldier) is one of perception; it is an intellectual experience, differing from the experience of the arts mainly in the proportion of the elements which compose it. These proportions may be analyzed thus: the object presented to thought in the former experience is less significant in itself than the object presented by a work of art. The physical circumstances surrounding the former, however, are more stimulating; producing a heightened activity, not only of the senses, but of all the faculties; so that though the object is slighter, it can still waken the farthest echoes in the mind.

The mountain climber's experience and poetic experience are equivalent in the depth and richness of associations involved in them. The quasi-mystical character of both alike depends ultimately on the completeness and intensity of response within the mind.

7) How—might we say, in summary—does this theory claim to commend itself? The claim is, first, that it suffices to account for the phenomena of beauty; and second, that it does not invoke principles outside the range of ordinary psychology: "Miracles should not be multiplied." The phenomena to be explained are the qualities by which poetic experience seems to approach the perfect activity and happiness of contemplation. And the explanation reduces to this: We desire to see all truth in a simple glance; and art shows us a great deal of truth in a simple glance.

In the appreciation of music and of pictures, we get a momentary and fleeting glimpse of the nature of that reality to a full knowledge of which the movement of life is progressing. For that moment, and so long as the glimpse persists, we realize in anticipation and almost, as it were, illicitly, the nature of the end. We are, if we may put it, for a moment *there*, just as a traveler may obtain a fleeting glimpse of a distant country from an eminence passed on the way, and cease for a moment from his journey to enjoy the view. And since we are for a moment *there*, we experience while the moment lasts that sense of liberation from the urge and drive of life, which has been noted as one of the characteristics of aesthetic experience.[62]

Poignant happiness—this is the principle—may cause us to forget, not only that our happiness will not last, but even that it is not happiness in the full sense of the word. Dante can love Beatrice so much that in certain moments all his mind may be filled with what she is, mindless of what she is not; that she is not immortal and that she is not divine. But he will not really confuse her with the immortal and the divine. In the *Commedia* she is only the guide to the "Love which moves

[62] Joad, C. E. M., *A Realist Philosophy of Life*, quoted by Gilby, *op. cit.*, p. 102.

the sun and the other stars." And poetry too has only the function of leading us above itself.[63]

As a matter of fact, even the moments of poetic enjoyment do not encourage too exalted an interpretation of themselves. " They are gifts of divine fortune . . . yet there is sorrow at their centre. . . .[64] The happiness of poetry is not perfect. It does not satisfy our love even though we love it. And the tears which are always on the margin of the mind when great beauty moves us, may attest with equal force not only the transience of the vision which delights us, but also its inferiority in kind to the perfect knowledge of which it is only the token and symbol.

IV. The Artist and The Critic

Practical Corollaries

1) A work of art must depend to some extent on discipline of mind: on thinking.

We have seen the consummate and bewildering order that can be traced in an analysis of even one beautiful sentence. Obviously, as we noted, such order cannot be entirely deliberate. The Christian psychologist can make two deductions. There is an instinct for order in the human soul, one phase of the native excellence by which the soul is an image of God; secondly, this instinct may be identified as one factor—among others—in the operation of the " unconscious mind."

Apropos of the unconscious we remarked that mental habit could acount for the presence of multifarious elements in the mind, but not for their organization. Something new is produced by the artist's activity, and we must suppose the entrance of a new principle, some initiative—instinctive and spontaneous—which cuts across the lines of mental inertia and gives them a new direction and combination.

But there is a risk in overemphasizing either the habitual or the spontaneous and instinctive elements in art, for we are

[63] Cf. Blondel: *La Pensée,* Vol. II, pp. 184-185.
[64] Gilby, *op. cit.,* p. 109.

naturally prone to neglect the element of discipline. Instincts must be cultivated. Moreover, if the unconscious mind is distinct from mental habits, yet it works—like any faculty—according to habits, and depends on them. And mental habits, like mental instincts, are cultivated by thinking. Hence, if the poet must avoid too much reflection in the moment of poetic creation, it will do him no harm to have reflected in the past.

But the poet's discipline cannot be merely mental. One faculty cannot be cultivated without some cooperation from the others. And the strength of poetic powers must depend on temper of the will as well as of the mind. It is true that artists are not generally examples of asceticism. But the greatest art is never found unconnected with moral greatness—if not exactly moral goodness. One part of that energy which is defined as a source of genius is undoubtedly moral energy, not merely physical. Moreover, artists are nearly always disciplined somehow; from the exile of Dante to the poverty and illness of Francis Thompson, we can trace the part which is played in the development of poets by what might be called the asceticism of circumstance. Even poets in whom weakness of character accorded with a tenuous poetic strength have exemplified this rule: of their cherished vices Providence made instruments both to scourge and purify them; and their very humiliation has given them a measure of that reality, which has come to others through natural endowment or more dignified sufferings.

We have deprecated the tendency to liken mysticism and art too closely; but the analogy is useful—inevitable, indeed—and within its limits can support a valid argument. This analogy suggests that poetic power, like the capacity for contemplative prayer, is based on a highly trained intellect and will. The lower one is in the degrees of preparation, the more must reasoning and effort predominate; one approaches the freedom of the highest stage (provided the capacity is given at all) in proportion as he approaches its intellectual and moral discipline.

Is it not a just criticism of the Surrealists, and an explanation

of the sinister absurdities to which (despite their technical refinement) they are betrayed, that they demand and practice this high freedom, at the same time disowning discipline? [65, 66]

2) The theory proposed in this paper brings art within the sphere of the true and the good: of life as it is known to the reason. There follows an important conclusion concerning the capacities and the rights of criticism.

The conclusion is this: that the artist has no supra-rational entrée to truth, and that therefore he is not a prophet before whom the philosopher, or the scholar, or the scientist must keep silence. The word "supra-rational," however, is misleading. There is a justification for using it, in contradicting what is often claimed for poetry; but we should note that a great part of poetic knowledge has nothing to do with reason at all, and hence cannot be either supra-rational or rational. The truth which mainly concerns the poet, and poetry, is ontological; reason, on the other hand, works only in the sphere of logical truth; its essential function is to combine judgments;

[65] To qualify the analogy accurately, and to give a just notion of ascetic theology, it should be noted that the lower stages of prayer are not undertaken primarily with a view to lifting the soul to higher (i. e. extraordinary) stages, but primarily in order to perfect it in ordinary virtue. (We do not consider the question whether a certain degree of contemplation is the vocation of all souls, and is hence an ordinary degree of the spiritual life.) The intention to reach an extraordinary stage of mysticism would in fact be illicit if adopted as an *absolute* motive of the spiritual life; e. g., "My reason for entering religion is that I want to have mystical graces like St. John of the Cross." (It would of course be legitimate as a conditional motive. Cf. A. Poulain, *Des Grâces d'Oraison*, pp. 453-6.) Moreover, such an intention must generally fail, for the history of ascetics shows that the regime of "purgation" culminates in mystical graces only in the most exceptional souls. To further discourage those who would dissect the life of grace, it is a fact that the mystical vocation sometimes fulfills itself so swiftly that the stages of preparation can hardly be traced. Even more than of poetry, is it an axiom of prayer that "the spirit bloweth where it listeth."

The law, then, is in one respect negative: you cannot have art or contemplation without discipline. But there is no assurance that discipline will lead either to art or mysticism: it is a condition, not a cause.

[66] Theology suggests, in addition, a simpler objection. Although there is an instinct for order in the human soul, those who would leave art entirely to instinct are forgetting one whole side of their heritage: they recall the Image of God; they forget Original Sin.

and in this sense everyone might be said to have a supra-rational entrée to truth, because everyone must have a perception of ontological truth as a preliminary to judging or reasoning.

But the artist does express judgments, and does reason from them to conclusions; and this principle at least can be formulated: that so far as he concerns himself with logical or rational truth, so far he is amenable to the laws of reason, and to the judgment of those who can apply them.

The artist is of course superior to the critic in his power to perceive and focus ontological truth. But this claim admits two qualifications. The superiority is one of degree and not of kind: "the poet's vision is simply a sublime, swift, perfect form of what every human being does whenever he thinks." Secondly, the connection between the artist's capacities for ontological and logical perception is—unhappily—only accidental. In judgment and reasoning he may be actually inferior to less mercurial minds, and he can enforce logical untruth by the power of ontological intensity. The radiance which that intensity produces gives currency to every false belief and philosophy and indefatigably haunts the ruins of dead systems.[67]

3) Does it make any difference to poetry, whether its message is true? This much we can assert *a priori,* that there is an essential weakness in logical untruth, even from the aesthetic standpoint. The logical statement is—potentially, at least—a contribution to the ontological richness of the poem: for, as we remarked, the two terms of the statement are ontological truths, and the verb is an instrument for focusing them. On the other hand, it is the nature of an untrue statement to cancel itself out: every untruth can be reduced to such a typical contradiction as, What is, is not; or, White is black.

Practically, however, this weakness is often so slight as to be of no consequence. Unless the untruth of a poem is obvious, it can be said to cancel itself out only in the long run, or perhaps

[67] It is to be noted, of course, that the poet's service of error is disinterested: *qua* poet he cares only for truth, because, *qua* poet, he cares only for beauty. But beauty is not logical truth.

subconsciously. Moreover, the ontological contribution of a subject and predicate considered merely in their grammatical function is so slight, compared with the rich meaning conveyed by a sentence praeter-logically, that it can hardly be deemed to affect the poetry one way or the other. For example, in Coleridge's lines,

> Till clomb above the eastern bar
> The hornèd moon with one bright star
> Within the nether tip,

the reader, like the poet, will cheerfully ignore the error in astronomy.

When the untruth is obvious or repellent, however, it may affect the beauty of the poem accidentally: that is, not by subtracting from the sum of ontological truth which the poem aims to concentrate, but by hindering us from noting and appreciating it. Thus, the undertone of sinister bitterness which runs through the lyrical and humorous melancholy of *The Rubaiyat of Omar Khayam* is disquieting and leaves a bad taste. The same objection holds against certain blasphemous passages in the writings of Thomas Hardy: from the aesthetic viewpoint, they are a distraction.[68]

It is a different thing to ask whether a poet's habitual grasp of truth makes any difference to beauty. The question is perhaps allied to that of discipline in the poet. And it would seem that this element—truth in the poet: his view of life—must affect poetry much more deeply than the logical truth of a particular poem. If the poet's experience, or philosophy, or faith, is cramped and partial, to that extent there is implied a poverty and disorder in his soul. And this means in turn a

[68] T. S. Eliot remarks: "The chief use of the 'meaning' of a poem, in the ordinary sense, may be . . . to satisfy one habit of the reader, to keep his mind diverted and quiet, while the poem does its work upon him: much as the imaginary burglar is always provided with a bit of nice meat for the house-dog." (*The Use of Poetry*, p. 144.) No doubt the logical meaning of poetry has this use, but it can have others at the same time. And what has been said concerning the effect of obvious or repellent untruth applies even if the logical meaning is considered only as a means of diverting and quieting the conscious mind. The expression of an offensive or absurd idea will not quiet but arouse the conscious mind.

lessening of the power not only to amass but to order and concentrate that ontological truth which is the substance of beauty. And since these two qualities—richness and concentration—are essential in poetry, it follows that the corresponding attributes are essential in the poet: namely that he should be magnanimous (in the radical sense), and have a spiritual habit of order.

4) Can aesthetics supply a canon of criticism for work that is dedicated to melancholy? The spirit of melancholy seems specially to have pervaded the literature of the 19th and 20th centuries, assuming shapes of most diverse kind and power; from the sentimental despair of many 19th century lyrics, to the tragic blasphemies of Thomas Hardy's novels, and the bewildered resentment of certain modern novels and short stories.

Some prestige attaches to the lyrical saying that " our sweetest songs are those that tell of saddest thought." If this opinion may be taken as a rule of criticism, then it applies to the sweetest songs, not the greatest. Dante's *Commedia*, despite the hopeless tragedies and horrors of the *Inferno*, is not melancholy.

The Christian, if he accepts the notion that beauty is a quality of truth, must conclude that there is a certain incompatibility between beauty and sadness. Sadness can never be wholly absent from human art, because art cannot comprehend the whole of truth. This limitation has even a value of its own, for it reflects the human condition, showing less of abstract reality but more of the reality of life: we are strangers to the white light of absolute truth, and in art prefer to see it broken into the colors that we know. But our first conclusion is valid to this extent, that in proportion as art approaches absolute truth, so far it must recede from sadness. Great art will have the note of joy, and in the greatest art—art in which truth is most complete and its splendor sharpest—joy will be dominant. To state the principle in the most literal terms possible: the ultimate truth cannot be sad because it is God.

5) Is beauty objective? Yes, because truth is objective.

It will be useful, in solving difficulties, to recall that, strictly

speaking, beauty is the quality of truth, not of a poem. The question, then, applies primarily to what is expressed, not to the means of expression.

When one reader is entirely unaffected by a poem which others find beautiful, it is because differences of sensibility or experience prevent him from perceiving the truth which the poem manages to convey to others.

In a sense, of course, every kind of expression is only a factor in a subjective process, for the act of understanding is in the mind, not in objects; moreover, every kind of expression is a language: to some extent conventional, and needing to be learned.

But we will not deny objective value to the sentence, " Homo est animal rationale," simply because it is necessary to cooperate with the words, or because we do not know Latin.

Let us add that the beauty of a poem might properly be called subjective, if the connotations of the words, form, rhythm, etc., were so esoteric or obscure that only readers of special keenness or background could get them. And it is doubtless true also that a poem should be considered greater—other things being equal—in proportion as its connotations are more universal; that is, conveying nearly the same meaning to a greater variety of readers.

6) Should art be imitative?

In its extreme sense, this question involves the opposition between realism and abstractionism in painting; between the approximation to ordinary speech in literature, as advocated by Wordsworth, and James Joyce's experiment with the invention of words never before heard.

Let us recall the answer suggested long ago by Plotinus. Plotinus said: ". . . first we must observe that natural things themselves are an imitation of something further, and next we must bear in mind that the arts do not simply imitate the visible, but go back to the reasons from which nature comes." [69]

[69] Quoted by Bosanquet in *A History of Aesthetic*, p. 113, referring to Plotinus, Creuzer's edition, p. 1002.

Although this passage implies the Platonic notion of "reasons" or "ideas," it is in harmony with Maritain's explanation:

> Imitation . . . *materially considered* . . . is merely a means, not an end . . . if the joy produced by a work of beauty proceeds from *some truth,* it does not proceed from the truth of *Imitation as a reproduction of things* . . . it proceeds from the truth of *imitation as manifestation of a form.*[70]

Art, then, is concerned to imitate, not nature, but the form which God has put in nature; the meaning, in short, of which natural things and combinations are the expression.

For imitation, in the sense of realism, this answer obviously furnishes no general rule; rather implying that a rule can only be made for individual cases, by applying the principle.

Although this principle has no direct reference to the premises of the present theory, these premises yield an almost equivalent conclusion, and suggest an application to the question of realism.

We saw that a work of art requires two cardinal qualities: it must be rich in truth, and the truth must be concentrated. Now the advantage to be gained from the use of imitative details—of realism—is connected with the first quality: through their connection with everyday life, these details bring with them a wealth of associated meaning; they enrich the truth of art. This is the force of such realism as Wordsworth uses, for example, in the sonnet *On Westminster Bridge.*[71]

The disadvantage of realism is connected with the second quality of art: imitative details, because they are heterogeneous in kind and meaning, are hard to focus; realism favors the cumulation of truth, but not its concentration. This difficulty is

[70] *Art and Scholasticism,* pp. 58-59; cf. pp. 189, 192. Cf. also Watkin, *The Philosophy of Mysticism,* p. 34.

[71] Some realism, of course, is merely banal, like Wordsworth's description of the little pool:

> I've measured it from side to side,
> 'Tis three feet long and two feet wide,

—the banality consisting precisely in the absence of the special virtue of realism: the details, that is, are not charged with meaning, but convey only a trivial truth.

perhaps best illustrated by a *reductio ad absurdum*; supposing, let us say, a combination of the lines, " That time of year thou mayst in me behold . . ." with the more realistic details of " When icicles hang by the wall . . ." In both poems Shakespeare conveys a vivid and lovely vision of winter; the objection to their combination amounts really to this, that they will not focus.

7) Since the use of images in art is a species of realism—even fantastic images being a patchwork of realistic elements in fanciful combination—it may seem a contradiction, in the light of what has been said, to assert that the special virtue of images is their intensity of meaning, their power to concentrate truth. But in the preceding paragraph we were concerned with the organization of many images into a coherent pattern; here we are concerned with images taken singly.

Realistic details are difficult to organize one with another precisely because they are so elaborately organized and differentiated within themselves. Just so it is more difficult to get an effect of unity in combining two statues than in combining two unformed blocks of marble. It is not a contradiction, then, to say that the special virtue of images is their power—singly—to focus and concentrate truth; whereas their special defect—a defect most pertinent to realism, where little room is allowed for selection—is their reluctance to be combined one with another.

As to the fact that images have the special virtue of concentrating truth, almost any random example will serve as a demonstration. Compare, let us say, the word, man, with the image of a man in a painting. The word conveys little save " member of the human race " or " masculine " or " rational animal." But the picture, with almost equal succinctness, may portray all the bewildering complex of truths which are in actual fact concentrated in a living man: truth of color, size, age, posture, race, dress; and, if it is a very good picture, it will to some extent suggest his biography and philosophy. And in literature, of course, it is the same special virtue of images that impels the poet to write, " Life's but a walking

shadow, a poor player, etc."—or indeed to use any concrete simile.[72]

8) The same aesthetic principles are involved in the question of impressionistic art. The reference here is not to the Impressionist school of painting which Monet initiated, but to a more general technical habit, which emphasizes allusiveness, and richness and variety of images, at the expense of the organization proper to the particular kinds of art: in poetry, at the expense of syntax, meter, and even articulateness; in painting, at the expense of order in line, mass, and color.

We have noted [73] that, while poetry is concerned mainly to communicate ontological truth, the logical structure is a means of focusing this truth. And it is a means which even the most allusive and luxuriant poetry can ill neglect. Shakespeare's song, "Full fathom five thy father lies," could be considered an eminent example of impressionism, save for its organization. And it becomes apparent how much this organization contributes to the poem's effect, if we try to imagine the same details of imagery cast in impressionistic form—verbs discarded in favor of dots, and the articulations of rhyme and meter dissolved in a kind of muttering echo of the "stream of consciousness."

The defect of impressionism, then, is that it neglects order for the sake of richness. Its aim is the mere cumulation of meaning: and as a result the meaning is often presented not in order and focus but merely piled, as it were, in a kind of vulgar abundance.

9) The classical "Unities" of time, place, and sentiment, to which less attention is paid now than formerly, deserve mention among the other devices of organic order, whose function is to focus the luminous "material" of art.

The Unities are mainly associated with drama or with dramatic poetry. Their contribution to the specific *splendor* of art is obscure only in the measure in which the beauty of an entire play or poem is less obvious than the beauty of short

[72] See also pp. 36-37.

[73] Pp. 35-36.

passages. Nor does this contribution become more unimportant by being less noticed; beauty can have its effect even though not consciously recognized.

If less attention is paid to the Unities now than formerly, it is not true to say that they are, or can be, neglected. As T. S. Eliot points out, ". . . the Unities differ radically from human legislation in that they are laws of nature. . . . The laws . . . remain valid in that every play which observes them *in so far as its material allows* is in that respect and degree superior to plays which observe them less."[74] Since they are natural laws, it follows not only that they cannot be neglected without harm, but that they will suggest themselves to the artist and be applied by him, even though he is not consciously deferring to rhetorical tradition.[75]

10) What is the function of rhyme and rhythm in poetry?

We have noted that these devices, in common with all other modes or organization in art, have the virtue of concentrating the truth expressed.

Rhyme and rhythm contribute in a second way, also, to the intensity of poetry. That is, they not only help to focus the truth signified by the words, but they are themselves a kind of language. By an idiom, as it were, of music, they convey a second and concurrent meaning, which supplements or enforces the meaning of the words.

It is not suggested, of course, that this auxiliary idiom is as distinct as words. Music itself is not. But it is more natural; and, as we remarked in discussing the connection between images and thought, the very vagueness of the medium of expression as regards the intellect gives it an added power of suggestion and connotation. The meaning cannot be put into words, but neither is it limited by the precision of words.

This meaning is, however, occasionally definite enough to

[74] *The Use of Poetry and the Use of Criticism*, pp. 37-38.

[75] Apropos of organization of art in large scale, cf. T. S. Eliot, *Selected Essays*, p. 280: "The concentration resulting from a framework of mythology and theology and philosophy is one of the reasons why Dante is a classic, and Blake only a poet of genius."

illustrate, and even suggest, the principle. See, for example, in the *Rubaiyat,* how the verse structure enforces the mood of humorous yet very sad resignation; the urbane, Epicurean despair. Throughout the poem, the rhythm hardly deviates from its pattern, as the ideas never desert their level and stagnant calm; the verse expands rather than flows—like a lake rather than a stream—dark and still below, and only stirred at the surface by a wind of cold humor. In the same way the mood is echoed by the sad monotony of the rhyme, from which, after two lines, the verse wanders as if in half-hearted speculation, but to which it recurs again at the end of the fourth line, coming back quietly to a place which is hopeless and yet home.

It is to be noted that the same analysis can be applied in the plastic arts to the devices of rhythm and assonance in line, mass and color. Here again the analysis cannot probe to the limits of the effect, but the emotional quality, the suggestive power, of certain patterns, such as the circle, the triangle, and the square, can be discerned and even tabulated.

11) Why write in poetry; why not just say what you mean? Although this objection is not very penetrating, it is worth considering, not only because the doubt reflected by it is widespread, but because it leads back to a basic principle of our theory. It would be in the sense of this objection to suggest that instead of writing

The year's at the spring, etc.

Browning should simply have remarked, "It's a beautiful morning," or "It is a morning that inspires happiness and hope." Browning, of course, would have replied, "But that is not half of what I mean." Or, if he were careful about many distinctions, he might have explained: "This conveys my logical meaning, but it entirely neglects my ontological meaning."

The objection, then, is answered by recalling the distinction between logical and ontological truth. It is ontological truth which mainly interests the poet; it is this which provides the

marrow of his poetry, and which is the much harder to convey, so much harder, in fact—the ability is so special and rare—that we might almost define the poet as the man who can say what he means.

12) Is art above morality?

We have noted among the qualities of art that it appears as a kind of end in itself. Its function is merely to satisfy an essential longing of the mind; we desire only to see it, not to use it. It is this characteristic whose exaggeration is expressed in the trite formula, "Art for art's sake." Nowadays art is in danger from an opposite exaggeration, namely the conviction that the artist should be exclusively social-minded; and distinguished names are found subscribed to the formula, "Art for sociology's sake." But a concern for social progress is still not a preoccupation with morality; and the "art for art's sake" exaggeration is perennial enough to warrant a renewed effort to clarify the principle.

It is strange to place art above morality on the ground that it seems a kind of end in itself: it seems so because of its connection with a process which is at the very center of morality; namely, the tendency of the intellect toward its complete object and happiness. Of this object and happiness art can offer only a symbol and foretaste; it is not truly an end in itself, but only seems so. And art would not be above morality in any case: if it were truly an end in itself, it would be the norm of morality.

This question is sometimes raised in a different sense; meaning, not: Is art exempt from morality? but: Has art any positive concern with morality? Is it not a mistake, in other words, to use art as a means of propaganda for ethical or social or religious doctrine? As a concrete refutation of this opinion, there are the Gospel parables. And for a principle, it seems unexceptionable to say that there is no reason why anything except the last end should not be used as a means to something else.[76]

[76] It goes without saying that there is no question here of using intellectual substances. They (angels and men) are persons, i.e. sovereign beings, with no

The doubt is apt to persist, however, that such a use of art, despite occasional success, is yet a danger from the aesthetic point of view; a doubt based on a vast quantity of poor art dedicated to intellectual and moral improvement or to the effecting of social or political reforms. The name Didactic Poetry has an unpleasant, dessicated sound which seems to typify the quality of this sort of art. In fact the case is typical enough to lead to a principle. Where didactic poetry is objectionable, the real objection is not that it is didactic, but that it is not poetry. For this defect, indeed, the didactic attitude is often partly responsible. And there is this much to be said for the doctrine of art for art's sake, that where one's purpose in writing poetry is simply to create beauty, he will not sit down to write until he feels himself ready to communicate generous riches of ontological truth; whereas one whose purpose is to teach a lesson will be tempted to begin when he is equipped only with a bare logical truth. But it does not follow that didactic poetry is a contradiction. The conclusion is that poetry is capably of driving home a lesson, but that the lesson has not, by itself, sufficient substance to furnish the needs of poetry.

V. Conclusion

The primary and essential function of poetry is to give pleasure: a pleasure so high and complete that it merits, in some sense, to be called happiness. The primary connection of poetry with supreme and final happiness—that is, its place in the moral order—is based on this function: as a foretaste of what the soul may finally attain, it is an inspiration of moral effort. Some such inspiration—some knowledge, however faint and momentary, of the goal of life—is necessary, since "there is no desire of what is unknown." But of course art is not the only, nor a necessary, source of such inspiration.

Art has a secondary effect, which is yet essential. This effect

superior to which they are ordered short of God Himself. In other words, they lack a note essential to the very idea of being "used," the note of inferiority; it is only the inferior that can be used, and it can be used only by its superior.

is education; not in the sense of imparting information, but of construing an order in the soul's faculties; in mind, will, and imagination. The existence of art depends on the order among its elements; an order which is both intellectual and sensuous. Appreciation of art involves some response to this order within the soul; and those, therefore, who live under the familiar influence of beautiful works, must gradually be permeated with order as a kind of habit. So Plato says (*The Republic*):

> Even the less gifted men, if they happen to grow up among the masterpieces of architecture, sculpture and painting, will imbibe a taste for beauty and decency: they will learn to find out what is perfect or what is deficient in nature and art, and this rectitude of judgment will gradually spread over to their souls.

With these essential functions, we should connect the effect which Aristotle attributed to tragedy, but which seems also to have place in other forms of art—namely, the catharsis or purgation of pity and fear. It is uncertain whether Aristotle conceived this catharsis simply as the relief which follows an indulgence of emotion [77]—the effect of a mere "discharge of superfluous vitality"; or as a purification of emotions—their conversion, through association with the orderly and intellectual content of art, into "virtuous dispositions."

If the latter supposition is true, then the catharsis is a part of the educative effect of art. If the former is true, the catharsis is, in relation to the other functions of art, merely negative and curative: alleviating conflicts and pressures in the soul which might interfere with the positive effects of art.

Art has a fourth effect which is accidental. It can be used to commend the truths of religion, philosophy, science, etc., truths which, though often extrinsic to beauty, may in the moral sphere be more important than beauty, and thus justify the use of art to enforce them. So, Homer's story of Hector may serve to persuade a reader of the excellence of courage. A picture of the crucifixion can prompt thoughts which will

[77] An emotion, however prompted by a dignified object: Aristotle certainly excluded from his notion of catharsis the effect of merely sensational art.

bring about conversion. Or, on a more trivial plane, an essay of Quiller-Couch can make some axiom of literary style so delightful that it will be remembered and applied ever afterward. And while we objected to the modern opinion which would make the function of art merely sociological, this function must not be underrated; it is at least as important today as when Charles Dickens wrote his sociological novels. But if art can enlist our imagination and emotion in support of our judgment, and thus make abstract truths practically available in living, it can, with almost equal readiness, enforce untruth. Poetry will give splendor to angelic thoughts, but it can also vitalize the ghosts of error; and if the *Divine Comedy* lives in our minds, it is true to say that the *Rubaiyat* haunts it.

Nearly all the practical problems of art reduce to the two functions outlined in the definition of beauty: the accumulation of truth; and its ordering, or focusing. A preoccupation with one or with the other perhaps corresponds roughly to the division between the Classical and Romantic styles.

* * *

There is a temptation to end on a note of almost abject humility. Those Christian ages which produced the greatest art—or prepared for its production—concerned themselves hardly at all with a philosophy of art. The historical fact reinforces the warning of morals and psychology: to understand is not to do.

There is, of course, a place for theory, although the danger of too much self-consciousness is always present. A philosophy of art will be useful if it sets us on the path toward the sources of creative strength—and away from itself. But it remains uncentral and secondary. The important thing is not to know what beauty is; not even to know that it is a quality of truth—if so it be; but to know, or care, what truth and goodness are: to love the substance more than the splendor.

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FAITH AND MYSTICISM: TWO STUDIES

I. *MEMRA*

In the New Testament, πίστις (faith) and πιστεύω (trust, believe) are found associated with the ideas, among others, of "knowledge," "intellectual conviction" and "truth" on the one hand, and of "light" and "vision" on the other. These two phases of one real thing, poles of one unbroken current, supply the two essential directions of approach to a theological study of supernatural faith. Conversion to the "light" through the affirmation of relevant judgments, faithful to the content "intuited" in the limited "vision" of its individual participant or accepted from the whole body of its witnesses; and "light," an "emanation" of the pure spiritual essence of the Absolute: the determination of the meaning of the Christian Religion and the relevance of its Magisterium, the relation between the objects of faith and the homogeneity discovered in the development of doctrine, the condition in contemplation of true theology and the condition in theology of faithful contemplation—these are subjects defined from the nature of faith and analysable in terms of this ultimately discriminable but primordially fused twofold fibre of the biblical texts.

The present study is devoted to the phase of "knowledge," "intellectual conviction" and "truth," and to certain important general considerations. It will be followed by a study of "light" and "vision" in relation to the New Testament πίστις, and both studies are written with a view to examining the relation of the two, and the meaning of both in relation to the theology of faith and the Magisterium and to the understanding of theology itself.[1]

[1] Probably the best introductory reading is Antoine, "Foi," in *Supplément au dictionnaire de la Bible*, iii, coll. 276 ff. Cf. Warfield, "Faith," in Hastings, *Dictionary of the Bible*, i, pp. 287 ff.; Gardner, *The Religious Experience of Saint Paul*, p. 109 and context of the relation of profession of faith to Baptism; and Morgan, "Faith

Pauline texts supply theology with classic material.[2] Thus, the second epistle to the Corinthians: διὰ πίστεως γὰρ περιπατοῦμεν, οὐ διὰ εἴδους, "for we walk by faith, not by sight."[3] Πίστις is opposed to εἶδος, and εἶδος is from εἶδον, "I have seen." Perhaps, therefore, πίστις must at least include an imperfect "intellectual consciousness" here below, in contrast

(Christian)," in Hastings, *Encyclopaedia of Religion and Ethics*, v, pp. 689 ff. Harent, "Foi," in *Dictionnaire de théologique*, vi, coll. 55 ff., is useful for a first acquaintance, but tendentious from the point of view of apologetics. And as regards this essay, it must be noted, lest our emphasis on the "intellectualistic" phase of faith appear tendentious, that we have nowhere forgotten the important phase of "trust," "*avoir confiance.*" Cf. *infra*, pp. 68-69.

[2] Which cannot be festooned indiscriminately. Harent, *ibid.*, 58, quotes *I Thess.*, i, 8, 9, and says: "Voici comment il explique et prouve cette assertion." It is, however, nothing like a proof of the precise intellectual nature of πίστις. So for *II Thess.*, ii, 13, πίστει ἀληθείας, "by faith in the truth." There is no definitive apologetic value in: "Mais la vérité n'est-elle pas le but et l'objet de l'intelligence, de la croyance?" (*ibid.*, 58), if these terms are to be understood with their precise scholastic significations; that is at least until the last have been defined and the psychology which they suppose certified. Such definition and certification are beyond the scope of the present essay, though this is written with a view to a theological study which will include them. This having been observed, no misunderstanding will arise if we add that the conclusions of, e. g., Prat, *La théologie de saint Paul*, 14, II, p. 290, are in no way denied, provided that "intellectual" be not taken *here* in its precise scholastic sense: "L'*élément intellectuel* n'est jamais absent . . . , car toute foi est une conviction et toute conviction suppose un assentment de l'esprit . . ." For our immediate purpose is to discover (1) what spontaneous, unreflective conceptions enter the consciousness of faith in these New Testament texts; (2) whether such conceptions could contain at least grounds for the scholastic definitions proposed with a view to explaining them, without contradiction and without strain; and (3) whether they may, or certainly do, derive from experiences inexhaustible in terms of the latter. These seemingly subtle discriminations are of great importance in determining, not only the validity of a theological treatise on faith, but also the very nature of theology. To keep this clearly in mind, we have placed words like "intellectual," "truth," etc., in quotation marks to signify their spontaneous, unreflective significations; otherwise they have their Thomistic significations, or certain current philosophic ones; whether one or the other will be sufficiently indicated by the context, as also will the significations, for our present purpose.

Hebrew philology has been taken into account, but its explicit discussion is beyond the scope of this essay. An outline will be found in the art. in the supplement to the *Dict. de la Bible, supra*, note 1. There is also an outline of classical Greek usage.

[3] *II Cor.*, v, 7. The context is of Christ's special presence for us in heaven, verse 8. The argument is that εἶδος refers to the "perfect knowledge" which will make Him thus present. This is valid argument, though the precise intellectual nature of the "knowledge" is debatable.

to the " vision " of heaven. If so, it would seem that the same contrast is in the mind of the apostle when he writes the famous words: " *Videmus nunc per speculum in aenigmate: tunc autem facie ad faciem.*" [4] " We see now by means of a mirror in a riddle, but then face to face." Πίστις is from πείθειν, " persuade " or " seek to persuade " (*II Cor.*, v, 11; *Gal.*, i, 10); πείθεσθαι = " allow oneself to be persuaded or convinced "; πεποιθέναι = " be convinced," " have confidence," [5] the Greek root πιθ being connected with the Sanskrit root *bhandh*, " to bind " [*bheidho* → (φείθω and φείθομαι) → πείθω and πείθομαι].

Nevertheless, πίστις has a large sense for Paul which makes it hard to draw exact theological definitions from his use of the word in these contexts. Thus Lagrange, commenting on *Gal.*, iii, 23 ff., says:

> Πίστις with the article, the word being determined by the explanation of verse 23: faith in Jesus. This faith *comes* (verse 24), it has therefore an objective side. Yet it is neither the gospel, nor the content of the gospel. According to the usual Paulinian meaning, it is the faith which exists in the mind of the faithful, but Faith considered as a new régime, opposed to the Law.[6]

Moreover, the precise intellectual nature of πίστις in Paul is debated among the protestant critics even while certain approximations are suggested by some of the texts which they cite. Thus, the writer of the article on Christian Faith in Hastings' *Encyclopaedia of Religion and Ethics* says that the Pauline faith is a thing of the heart rather than of the intellect. Doubtless the apostle included the acceptance of doctrine (*Rom.*, x, 9). The grace of God had no meaning for him

[4] *I Cor.*, xiii, 12.

[5] Cf. Prat, *op. cit.*, II, p. 282; Antoine, *Dict. de la Bible, loc. cit.*, col. 278.

[6] " Πίστις avec l'article, le mot étant déterminé par l'explication du vers 23, la foi en Jésus. Cette foi vient (vers 24), elle a donc quelque chose d'objectif. Pourtant ce n'est pas l'évangile, ni le contenu de l'évangile; d'après le sens paulinien ordinaire c'est bien la foi dans l'esprit des fidèles, mais considéré comme un nouveau régime, opposé à la Loi." Lagrange, *Épître aux Galates.*[3] Paris: 1926, p. 89. But cf. Lightfoot, *Saint Paul's Epistle to the Philippians.*[7] London: 1883, p. 106, where he makes ἡ πίστις = the teaching of the Gospel.

apart from the redemption drama in which it presented itself to his imagination and thought. But the author denies Wrede's assertion (*Paulus*, Tüb., 1904, p. 67), that what Paul means by faith is nothing more than the obedient affirmation of the preaching of redemption. In his doctrinal constructions, Paul has no other object than to set forth the sin-forgiving, salvation-bringing character of grace, and fundamentally it is this grace he asks men to believe in and to trust.[7] The same writer goes on to speak of the relation between πίστις in the mind of Paul and his doctrine of mystical union with Christ, and concludes: "Like all mystics, he finds the idea of faith inadequate to express the religious relation. Whether he regard this mystical union as only a deeper interpretation of faith, or as something that follows on it, is not easy to decide."[8] Cf. *Gal.*, ii, 20; *Eph.*, iii, 17.

Yet there are texts in which Paul seems indeed to stress the obedient affirmation of the preaching of redemption. One of the most striking is *Rom.*, x, 9, itself cited above, where, as throughout the epistle, faith is spoken of as a principle of justification and salvation:[9] "Confess with your mouth that

[7] *Loc. cit.*, p. 689. Cf. Hatch, *The Idea of Faith in Christian Literature*, and the same author's *Pauline Idea of Faith*. These two works are inaccessible to us, but for a short summary of the first see *Journal of Theological Studies*, xxviii (1926), pp. 73 f. (W. Telfer). He finds in all the writers whom he studies, that "mental acceptance" of the Gospel, Christlike trust, and Christian morality, are affirmed as somehow held together in the conception of faith received from Paul and John, and developed, often modified by some peculiar stress, in their modes of presentation. Besides trust and conviction, mystical experience tends to "colour" the ideas associated with faith. For Paul and John, faith is the door to mystical communion with God. And, according to Hatch, the post-Pauline writers are always unaware of the composite nature of what they discuss. Mysticism, unawareness of composition and modification by peculiar stress, must here be emphasized for application in the sequel. They are important facts.

[8] *Loc. cit.*, p. 690. Let us mention here, as it can be stated briefly, that light is thrown on this last question by the later theology of faith. The *fides formata* of St. Thomas and the scholastics, with all that is implied in it, is *at least* a clear partial *theologoumenon* of the depths apprehended by Paul. Cf. *Summa Theologica*, II-II, q. 4, a. 3, and the inseparable connexion of the Gifts of the Holy Spirit, *Intellectus* and *Scientia*, with love-formed faith, and of the Gift of *Sapientia* with love itself; *ibid.*, qq. 8, 9, 45.

[9] Cf. *Rom.*, iii, iv, x.

Jesus is Lord, believe in your heart that God raised Him from the dead, and you will be saved." [10] Nor can ἐν τῇ καρδίᾳ be taken to emphasize the "affective" part of the soul as against its "intellectual" part, since this use of καρδία, "heart," is a hebraism for the interior side of man in contradistinction from the exterior, and in the context opposes ἐν τῷ στόματί. Moreover, in the Septuagint, on which Paul depends so often, καρδία sometimes directly means the "mind," the "judgment." [11] In the pastoral epistles perhaps the most significant texts are those connecting false doctrine with loss of faith: "So it is with Hymenaeus and Philetus; they have failed in the truth by arguing that the resurrection has taken place already, and they are undermining some people's faith" (*II Tim.*, ii, 17, 18). This is not, however, so clear when quoted in full, as the author of the article in the *Dictionnaire de théologie Catholique* seems to maintain when he quotes the passage as: "*Hyménée et Philète se sont éloignés de la vérité . . . et renversent la foi de plusieurs.*" [12] It is at least possible to separate "*vérité*" and "*foi*," ἀλήθειαν and πίστιν, so as to make the loss of the latter a consequence of loss of confidence in the clarity of apostolic tradition and the teaching of Christ, or in any case a consequence upon the violation of the former. Love and knowledge, sentiment and ideational consciousness, are intimately related. So, no doubt, are truth and faith. But it would not be a valid argument to jump to the conclusion that faith is immediately concerned with truth and so has an intellectual nature. Πίστις could depend on some other psychological relation to ἀλήθεια, as, for example, *caritas* does on *fides* in the theology of St. Thomas.

This is not a denial of the immediate connexion of truth with faith in St. Paul. It only intends to correct an argument

[10] *The International Critical Commentary, Romans*[4], says: "This verse corresponds to and applies the preceding verse. The subject of the ῥῆμα which is preached by the Apostles is the person of Christ and the truth of His Resurrection. . . . What is demanded of a Christian is the outward confession and the inward belief in Him, and these sum up the conditions necessary for salvation." P. 290; *infra*, footnote 16.

[11] *DTC, loc. cit.*, coll. 59. *Exod.*, xxxvi, 2; *Deut.*, xxix, 4; *Jer.*, vii, 31; etc.

[12] *Loc. cit.*, coll. 59 f. The omission is his.

made too clear by curtailing of texts and of possible implications. Criticism arising from the latter *a fortiori* applies to arguments from *I Tim.*, i, 19, and it appears to the present writer that similar criticism must apply to any text taken alone. It has to be admitted, however, that the cumulative effect is strong. This becomes especially clear from comparison with those passages in which πίστις is used " objectively " in relation to a body of doctrine (it is irrelevant whether it is used *as* " *doctrina fidei* " or not; cf. Warfield, Hastings, *DB*, i, p. 831). It is argued that the word could hardly have taken on this further signification, if it had not first signified a subjective adhesion to a doctrine, and hence been related to judgments. This is true, though it is not strengthening to the argument to claim the further right to leap across centuries and cultures, to the scholastic philosophy of the specification of human acts, faculties and virtues. The connexion may be real, and we hope to insist on it in a future essay, but it is obscuration of the candid clarity of otherwise revelatory fact to claim that it is proved already.

Special mention may be made of two texts which throw light on Pauline use of πίστις. The *International Critical Commentary* largely supports our exegesis.[13]

The first is *Col.*, ii, 6-8: " Since you have had the messiah, even Jesus the Lord, brought to you, lead your life in him, fixed and founded in him, confirmed in the faith as you have been taught it. . . ." " As then ye received," says Abbott, " i. e. from your teachers . . . καθὼς ἐδιδάχθητε, ver. 7 "[14] This sense is disputed and read to mean " Christ *Himself*, the sum and substance of all teaching." Abbott replies that this does not agree so well with the usage of παραλαμβάνειν or the context, where there is contrast between *true and false teaching* in relation to the Christian life. And he quotes Lightfoot: " The central point in the Colossian heresy was the subversion of the

[13] *The International Critical Commentary*; T. K. Abbott, *Ephesians and Colossians*; Sanday and Headlam, *Romans*[4]; Moffatt, *Hebrews*. For the evolution from the " subjective " to the " objective " use of πίστις, mentioned above, cf. Lightfoot, *Saint Paul's Epistle to the Galatians*[10], p. 157.

[14] *Op. cit.*, p. 244.

true idea of the Christ," pointing out that Paul's theme in what follows, up to iii, 4, is not the notion of Ἰησοῦς or of Κύριος, but that of Χριστὸς. Compare the designation of the Christian preaching as ὁ Χριστὸς in *Philipp.*, i, 15, 17, and the τὸν Χριστὸν Ἰησοῦν τὸν Κύριον, where τὸν Χριστὸν is the immediate object of παρελάβετε. I. e., Paul is reminding them of the two elements of which the true doctrine of the Christ consists, the recognition of the historic Jesus and the acceptance of Him as Lord, τὸν Χριστὸν who is Ἰησοῦν τὸν Κύριον, and insists that thus they must remain "confirmed in the faith as you have been taught it," τῇ πίστει. True faith is organically related to true doctrine in the mind of St. Paul. In a sense it *is* a doctrine, and hence closely connected with the intellectual power of man and with knowledge. That takes us far. It would weaken a strong and enlightening argument to strain it into taking us all the way. No amount of exegesis will discover Paul saying verbatim: "*Objectum fidei est veritas prima* (the object of faith is the First Truth)," and "*objectum fidei est aliquid complexum per modum enuntiabilis* (the object of faith is something complex by way of a proposition)," [15] though he leaves ample room for the scholastic theologians, in an apprehension and a doctrine which will suffer no unnatural contortion or benumbing tension by such a development, provided that their surplus riches are left intact and inviolate.

The second text is *Rom.*, iii, 22-26: "It is a righteousness of God which comes by believing in Jesus Christ. And it is meant for all who have faith . . ." This is the crowning and characteristic sense with St. Paul; and it is really this which he has in view wherever he ascribes to faith the decisive significance which he does ascribe to it, even though the object is not expressed (as in i, 17; iii, 27, ff.; v, 1, 2). We have seen that it is not merely assent or adhesion but *enthusiastic* adhesion, personal adhesion; the highest and most effective motive-power of which human character is capable.[16] St. Thomas says that

[15] *Summa Theol.*, II-II, q. 1, aa. 1, 2.

[16] Sanday and Headlam, *Romans*[4], pp. 33 f. Cf. Prat, *Théologie de saint Paul*[16], I, p 228. Lagrange, on the same text, says: ". . . il envisage la foi en Jésus-Christ

this is the "*Fides formata*" as against the bare "*Fides informis*."[17] Its radical intellectual element is strongly suggested by the parallels to this expression πίστις Ἰησοῦ Χριστοῦ in the other Pauline expressions: πίστις τοῦ εὐαγγελίου (cf. *Philipp.*, i, 27), "the faith of the gospel" or faith "*in*" the gospel: πίστις ἀληθείας (cf. *II Thess.*, ii, 13), "the faith of the truth" or "in" the "truth"; and πίστις τῆς ἐνεργείας τοῦ Θεοῦ (cf. *Col.*, ii, 12), "the faith in the power of God." The whole text of *Rom.*, iii, 19-26 is similar also in the sequence of ideas to that of *II Thess.*, ii; that is, sufficiently so to indicate an equation between "faith in Jesus Christ" and "faith in the truth."

This comparison of the πίστις Ἰησοῦ Χριστοῦ with πίστις ἀληθείας, etc., forms, together with some further comparisons from the New Testament, one of Prat's proofs that the expression does mean faith *in* Christ and not the subjective faith *of* Jesus which Haussleiter posited.[18]

Besides the texts already mentioned, the Fourth Gospel is markedly "intellectualistic"[19] in its conception of faith, as

(gén. objectif) comme le principe du salut; sa pensée ne va pas à une foi qui ne serait pas l'adhésion entière de l'âme." *Épître aux Romains*, p. 73. Cf. *ibid.*, p. 137: ". . . une conviction de l'esprit. Il croit, celui qui adhère aux vérités annoncées dans l'Évangile. Or personne ne regarde cette foi comme purement intellectuelle, puisque les vérités de la foi ne s'imposent pas directement à l'intelligence. Paul n'a pas examiné ce point, mais il ne pose jamais non plus le cas de l'homme qui croirait, sans tirer de sa foi aucune conséquence pratique. Celui qui croit à l'Évangile est en même temps celui qui désire l'embrasser."

[17] Cf. *in Epistolam ad Romanos, ad. loc.* "Haec autem fides ex qua est justitia, non est fides informis . . .; sed est fides per caritatem formata . . ."

[18] *Théologie de saint Paul*[14], II, pp. 543 f. The other texts are *James*, ii, 1; *Apoc.*, ii, 13; xiv, 12; *Mark*, xi, 22. Prat also refers to Philo and the Talmud, where the "faith *of* God" means "faith *in* God." His other decisive reasons against Haussleiter are: (1) The NT never elsewhere refers to such a subjective faith of Jesus. "Jamais le verbe 'croire' n'a pour sujet le Christ." (2) "Christ" is constantly offered as "*object*" of Christian faith. *Gal.*, ii, 16; *Col.*, ii, 5; *Philem.*, 5; etc. So is "Jesus." *Rom.*, x, 9; *I Cor.*, xii, 3; *II Cor.*, iv, 5, 14. (The last observation is against the theory that Paul's "Jesus" did not "become" Christ till after his resurrection. Haussleiter). (3) Is the comparison we have made above. (4) The *context* of *Rom.*, iii deals with the faith of the faithful in Christ.

[19] Morgan, *ERE, loc. cit.*, p. 690. Cf. Calmes, *L'Évangile selon saint Jean*, Paris-Rome: 1904, pp. 2 f., 60 ff., 189, 227 ff.; Howard, *The Fourth Gospel in Recent*

compared with that of Paul. The writer shows affinities with the Greek thinkers. Faith is a result of the impression made on the onlookers, by miracles, rather than the grace and truth manifested in Christ's words and deeds. His earthly career is presented in the light of a series of divine attestations of his claim to be the Son of God (*John*, ii, 11; iv, 53; xiv, 11; xx, 31; etc.). Believing and "knowing" are brought into close connexion with each other, and are even treated as identical. Like the Greeks and Philo, the evangelist attributes a saving significance to "knowledge,"[20] though, as in the theology of the Church, the ethical factor is strongly emphasized (*John*, vi, 44; v, 44; viii, 43; vii, 17; etc.).[21]

Of the epistle to the Hebrews, the writer of the article in Hastings' *Encyclopaedia of Religion and Ethics* says: "We find a conception of faith which is modelled on that of Philo. Faith is the vision of the eternal realities of the unseen world—God, His righteousness, His salvation, the better country—the vision of these realities and the conviction that they are more enduring than the thing we see and touch (*Heb.*, xi). As such it is the spring of all heroic action. . . . Of all New Testament conceptions of faith, that of Hebrews is perhaps the broadest."[22]

Criticism and Interpretation, London: 1931, p. 122; Lagrange, *Évangile selon saint Jean*[3], Paris: 1927, pp. lxx ff., 292, and esp. 59 f.: "Les σημεῖα sont le mot de Jo. pour désigner les miracles de Jésus . . . Dans Jo. le σημεῖον est employé pour sa valeur propre de signe; c'est un miracle contenant une indication surnaturelle spécialement sur la personne de Jésus. Tandis qu'un miracle annoncé par Moïse manifeste la gloire du Seigneur (*Ex.*, xvi, 7), Jésus manifeste sa gloire, cette gloire de Fils unique qui est en même temps celle du Père (i, 14)." Nevertheless, true faith does not necessarily *require* miracles; cf. Loisy, *Le Quatrième Évangile*, 2e éd. refondue. Paris: 1921, pp. 195 (*John*, iv, 48), 198, 234 (vi, 30), 267 (vii, 31), 512 (xx, 28). But for vi, 30 and xx, 28, see also Calmes, *op. cit.*, pp. 243 and 456.

[20] Morgan, *op. cit.*, p. 690. The summary is on the lines of the same article. We shall see in the second study, that the bald statement about miracles, as against grace and truth, is only true of one phase of the Johannine theology, and that it can be pernicious if unqualified. Cf. *infra*, pp. 75-76.

[21] Cf. St. Thomas, *Summa Theol.*, II-II, q. 2, a. 1. "Utrum credere sit cum assensione cogitare." Ad 3um: "Intellectus credentis determinatur ad unum, non per rationem sed per voluntatem . . . ."

[22] *Loc. cit.*, p. 690. But on the question of connexion with the school of Philo, and of authorship, see Prat, *Théologie de saint Paul*,[16] I, pp. 428 ff., for a balanced statement.

Indeed, this chapter xi of *Hebrews* is very important and, taken with the entire context (of confidence against discouragement and doubt) quite its most vital text is verse 1. For it is the nearest approximation to a definition of faith we have seen, and is used and developed as containing all the marks required for a definition by St. Thomas.[23] "Fides est substantia sperandarum rerum, argumentum non apparentium." Ἔστιν δὲ πίστις ἐλπιζομένων ὑπόστασις, πραγμάτων ἔλεγχος οὐ βλεπομένων. "Now faith is the substance of things hoped for, the evidence of things not seen." Moffatt translates it tendentiously as: "Now faith means we are confident of what we hope for, convinced of what we do not see . . ."[24]; but his exposition is best examined first, as, supplemented by the work of more profound exegetes, it is fruitful in showing how grammatical muddle and inconclusiveness can be reduced to revelatory, if not, perhaps, definitive, order, by the deeper gaze of theology.

Moffatt's exposition is as follows, insofar as it is relevant to the present essay. Ὑπόστασις is understood as "*une assurance certaine*" (Ménégoz); "faith is a sure confidence of thynges which are hoped for, and a certaynetie of thynges which are not seyne" (Tyndale), the opposite of ὑποστολή. Ἔλεγχος is used here in the sense of subjective "conviction" (the English word has acquired the same double sense as the Greek). This represents an idea for which the writer could not find a Greek term, and so used ἔλεγχος in a novel way. It is certain, says Moffatt, that the writer did not mean, (a) that faith gave substance or reality to unseen hopes, though this is the interpretation of the Greek Fathers.[25] So for the objects of faith in the sequel. When the writer says, e. g., that the patriarchs lived in expectation of the heavenly country, he does not mean they thereby made that place real or more real to themselves. This was no doubt true in a sense, but the point is the reality of these things which justifies faith in them. "It is faith as the reflex of eternal realities or rewards promised by God which is fundamental in this chapter, the faith by which

[23] *Summa Theol.*, II-II q. 4, a. 1.

[24] *ICC, Hebrews*, p. 158.

[25] See *infra*, footnote 34.

the good man lives." [26] (b) Faith is not the ἔλεγχος of things unseen in the sense of "proof." Human faith no doubt proves that there is some unseen object which calls it out, but the writer wishes to show, not the reality of these unseen ends of God, but the fact and force of believing in them with absolute confidence. "Such erroneous interpretations arise out of the notion that the writer is giving an abstract definition of πίστις," continues Moffatt, "whereas he is describing it, in view of what follows, as an active conviction which moves and moulds human conduct." This would not seem to exclude the marks required for a definition, but Moffatt is here vague. He is again informative when he says: "The happiest description of it is, 'seeing Him who is invisible' (verse 27), and this idea is applied widely. . . ." [27] It would be silly to try to get *Objectum fidei veritas prima* evidently out of this, but it is suggestive for the theologian if not conclusive for the apologist. It does not, however, tell us anything about the "intellectual" nature of faith. But the next considerations might. In the papyri, ὑπόστασις sometimes means the collection of title-deeds by which a man establishes his right to some property.[28] But, though this might have suggested the metaphor to the writer of Hebrews, the meaning here is "confident assurance." Similarly for ἔλεγχος; the legal or logical sense of proof [29] is out of place here.

The existence of human faith is in one sense a proof that an invisible order exists, which can alone explain men acting as they do act ἐν πίστει. But the writer assumes that, and declares that πίστις lives and moves in the steady light of the unseen realities. The sense of 'test' as in *Epictetus*, iii, 10, 11 . . . , is as impossible here as that of 'rebuke'; the force of πίστις in xi, 3-40 rests on its subjective sense as an inner conviction, which forms a motive for human life, and this determines the meaning of ὑπόστασις and ἔλεγχος as applied to it in the introductory description.[30]

[26] *Op. cit.*, p. 159. Cf. M.-L. Dumeste, *Revue biblique*, xliv (1935), pp. 533 ff.

[27] *Op. cit.*, p. 160. Cf. Westcott, *Hebrews*[3], *ad loc.* Westcott also excludes definition, because of the order ἔστιν δὲ πίστις (p. 351).

[28] Moffatt, *op. cit.*, p. 160. Cf. Moulton, in *Manchester Theological Essays*, i, 174; *Expositor*, Dec. 1903, pp. 438 f.; cited Moffatt.

[29] In classical Greek and elsewhere. Moffatt, *op. cit.*, p. 160.

[30] *Ibid.*, p. 160.

Westcott's conclusion is the contrary, and largely based on the difficulty of supposing that ἔλεγχος can express a state, and so seems to mean "proof" or "test."[31] But Prat throws further light on the text:

. . . if ὑπόστασις can have the meaning of persuasion, ἔλεγχος, which depends upon it, is not equivalent to subjective conviction. Faith then is not merely a pledge, but still more a part payment of things hoped for. [Prat has argued ὑπόστασις to mean here "reality."] It is according to Saint Thomas, a beginning of eternal life in us; because, following Augustine's explanation, to believe what one does not see at all is to merit the sight of that which one believes.[32]

Prat, like Westcott, argues from the premise that ἔλεγχος never signifies "subjective conviction."[33] But we have seen how Moffatt explains that it could have this signification: there was no Greek term for the idea, so the author used ἔλεγχος in a novel sense (could he have got this by association with a reflexive use of ἐλέγχω, "to inform *oneself*"?). At any rate, both translations appear to remain slightly tendentious, from the point of view of apologetics, though the exegesis of Prat and St. Thomas is evidently permissible. Moreover, if the Greek and Latin Fathers are truly unanimous, in interpreting ὑπόστασις to mean "that which gives true existence" and ἔλεγχος "proof" or "test," then it is necessary to follow them; insofar as, and in the sense in which, the Church forbids us to interpret Scripture except according to the unanimous consent of the Fathers.[34] This consideration, however, takes us beyond the scope of the present study, which is to discover the evident meaning of the texts. It suffices to say, that the

[31] Westcott, *Hebrews*[3], p. 352.

[32] ". . . si ὑπόστασις peut signifier persuasion, ἔλεγχος qui lui fait pendant ne veut pas dire conviction subjective. La foi est donc non seulement un gage mais encore un acompte des biens espérés [Prat has argued ὑπόστασις to mean here "réalité]. Elle est, selon l'expression de saint Thomas, un commencement de vie éternelle en nous; parce que, suivant l'explication de saint Augustin, croire ce que l'on ne voit point c'est mériter de voir ce que l'on croit." *Théologie de saint Paul*,[16] I, p. 462.

[33] *Ibid.*, p. 463. The reference to St. Thomas is *Exposit. in Ep. ad Hebraeos*, c. 12, lect. 1.

[34] On the Fathers and *Heb.*, xi, 1; cf. Westcott, *op. cit.*, pp. 352 f.

exegesis of Prat and St. Thomas, as expressed by them, is evidently permissible.

As far, though, as obtaining a definition goes, the text of Hebrews might seem unsatisfactory, in virtue of the writer's emphasis on the connexion with the future. I. e., faith does not merely live and move in the steady light of the unseen realities as such, but also, and eminently, bears as it were on those judgments which are relevant to God's promises and his power to fulfil them and to help men to fulfil them. Hence there is point in Moffatt's contention that "our writer uses πίστις, almost as Paul uses ἐλπίς (psychologically the two being often indistinguishable)," [35] and it is hard to escape associating this conception of πίστις with the later theology of the supernatural virtue of hope.

Objectum spei est bonum futurum arduum possibile haberi . . . Inquantum . . . speramus aliquid ut possibile nobis per divinum auxilium, spes nostra attingit ad ipsum Deum, cujus auxilio innititur. (The object of hope is a future good, difficult but possible to obtain. Insofar as . . . we hope for anything as possible to obtain for ourselves with divine help, our hope attains God Himself, on whose help it leans.) [36]

Nevertheless, St. Thomas himself puts order into seeming confusion. It is argued against the definition of faith taken from *Heb.*, xi, 1, that:

Diversorum virtutum diversa sunt objecta. Sed res speranda est objectum spei. Non ergo debet poni in definitione fidei tanquam ejus objectum (different virtues have diverse objects. But the object of hope is a thing to be hoped for. It should not therefore be put in the definition of faith as if it were the object of faith).

And St. Thomas replies that the act of faith has a relation

[35] *Op. cit.*, p. 161. In accordance with current usage, the term *psychically* should be substituted for *psychologically*. For the context indicates that the point of view of experience is signified, in contradistinction from the reflective exposition of experience. At the risk of appearing overly precise, it is necessary to avoid all confusion in regard to this distinction from the start. For without it, some of the most important discriminations to be made concerning faith, and the theology of faith, must remain obscure.

[36] *Summa Theol.*, II-II, q. 17, a. 1.

both to the object of volition, which is the good and end, as well as the object of intellection, which is the true.[37] As in the primitive theology reflected in the text of Hebrews, so in that of the later Church, πίστις and ἐλπίς are indeed combined psychically, and are psychologically known to be logically related, so that πίστις is the ἐλπιζομένων ὑπόστασις.

What, therefore, has been shown from this conspectus of certain phases of the New Testament texts? i) That a definition of faith implying that "*fides est in intellectu sicut in subjecto* (faith is in the intellect as in its subject)," [38] is not proved opposed to what we have there discovered; ii) that such a definition is probably very fertile in manifesting the deep significance of at least certain phases of the New Testament theology of faith and of the phase of consciousness and its progressive "humanisation" which such a theology implies; iii) that it gives only a fragmentary reflective and psychological analysis, however profound and fertile, of the processes discovered amid the apprehensions and conceptions of faith offered by the New Testament writers; iv) that the Pauline πίστις, in particular, is an actual whole, incapable of existing without the existence of all its parts, a living real thing, even more than "an active conviction which moves and moulds human conduct." In the life of souls in grace, faith is inseparable from love. This is the "Fides formata" of the developed theology of St. Thomas, and the Pauline πίστις can be said to contain it at least, and a great deal more besides. The bare "Fides informis" (faith not vitalised by supernatural love) is an abstract idea to which the circle of virtues found in souls in grace is indeed relative, but only in virtue of the relation of whole to part, life to fossilised stratum.[39] It can still be called "substantia sperandarum rerum, argumentum non apparentium," but it is not the light-filled organism which is the living πίστις of the Pauline theology.

Its mode of life, and the origin of that life, remain to be

[37] *Summa Theol.*, II-II, q. 4, a. 1. [38] *Summa Theol.*, II-II, q. 4, a. 2.

[39] "Caritas dicitur forma fidei, in quantum per caritatem actus fidei perficitur et formatur." *Ibid.*, a. 3.

examined with precision. Such an examination brings us to the second outstanding phase of New Testament theology associated with πίστις, the phase of "light," φῶς, with its further enlivening and enriching implications.

II. *SHEKHINAH*

"Light," and "truth," with self-donation to its implications, represent, from one point of view, the objective and subjective phases of faith, in the New Testament as well as the Old Testament; and, from another point of view, the psychic and psychological phases.[40]

From both points of view the second phase is immersed in the first, having initiation as a passion immanent in it, but implying action as consequence; action chiefly volitional, active within and upon the first, changing from phase to phase, discriminating contents and distinguishing terms, to assimilate the gift from the transcendent as fully and richly as possible by the most human contents of spirits "re-orientated" by grace. Re-initiation is thus ceaselessly given to growth and depth of theological reflexion.

But the first as object is first, entering consciousness with psychic immediacy, hence showing its temporal and illative priority to reflective determination and hence to all conclusions concerning the implications of its content. It is essentially an "illapse" from the transcendent; that is, from what includes the realm of the supernatural. In this sense it is a penetration of the transcendent into the realm of experience, of which the first phase is the entrance into consciousness of a mode of being which, owing to its previously transcendent nature, has never been the subject of judgments and predications. The struggle for expression implied in the sublime words of Augustine, and wrung from a being bewildered by the new light, show at the same time the significance of the Johannine theology for the

[40] The terms psychic and psychological were explained *supra*, footnote 35. *Objective*: appertaining to the nature of that which consciousness cognizes. *Subjective*: appertaining to, or arising from, mental operations.

greatest mystic of the patristic West, and the experimental condition of orthodox theology:

I discerned, even beyond my soul and mind itself, the unchangeable light of the Lord. Not this common light was it, which all flesh may look upon, nor was it of the same kind but greater, as if this light should shine more and more clearly, and possess the whole world with the greatness thereof. This light, I say, was not that former light but another, and altogether different from all such. Neither was it above my understanding, in such wise as oil swimmeth above water, or as the heaven is raised above the earth; but it was above me because it made me, and I was under it because I was made by it. He that knoweth Truth, knoweth that Light; and he that knoweth that Light, knoweth Eternity. Charity knoweth it.[41]

And, if there be any doubt of his meaning, let us quote Plotinus, the master of the neo-Platonists by whom Augustine had been guided towards this vision: " In this dance one looks into the fountain of life, the source of the mind, the origin of being itself, the cause of good, the ground of the soul." [42]

[41] Augustine, *Confessions*, vii, 10. Transl. Matthew, revised and emended R. Hudleston. London: 1923. Cf. A. Gardeil, *Le Donné révélé et la Théologie*[2], pp. 57-62; Newman, *Development of Christian Doctrine*[2], pp. 36-38, 324 f.; *Grammar of Assent*, pp. 188-191, 333-359; von Hügel, *Mystical Element of Religion*, I, pp. 25-39, 48 f., 55-58, 60 ff., II, 49 f., 334 f.; *Essays and Addresses*, I, pp. 131 f.; Suso, *Horologium sapientiae*, lib. i, c. vi; lib. ii, c. iv, vii.

[42] *Ennead* vi, 9, 9. Transl. from Ed. Budé. The whole of the wonderful passage of Augustine should be compared with the sixth *Ennead*, from the part quoted to the end. Compare especially 9, II, with the second half of *Conf.* vii, 10, where Augustine mingles biblical elements and Plotinus and his own experience, in a text which could be a background for all orthodox theology. The gift of faith and the search for expression; the " fides quaerens intellectum " of Anselm could hardly be more perfectly exemplified: " When first I knew thee, thou didst raise me up, that I might see there was somewhat for me to see, though as yet I was not fit to see it. And thou didst beat back my weak sight, darting thy beams upon me vehemently, and I trembled with love and horror, and I found myself to be afar off in a region of no resemblance unto thee, as if I heard thy voice from on high saying: ' I am the Food of the strong, grow apace, and thou shalt feed on me; nor shalt thou convert me like common food into thy substance, but thou shalt be converted into me.' And I came to know that thou *dost punish man for his iniquity, and hast made my soul to pine away like a spider.* And I said, ' Is Truth then nothing at all, seeing it is diffused neither through space finite nor infinite? ' And thou criedst unto me from afar off, saying, ' Yes, Yes; I Am, that Am.' And this I heard, as

The question of Hellenic influences upon St. John is beside the point. Indeed, it is clear that the insistence on historic events concerning the incarnation of the Logos, who is this eternal Life, Light and "Truth,"[43] introduces something not found by Augustine in the neo-Platonist books.[44] In virtue of this element, the emphasis is by no means always upon the interior light of the Plotinian mystic, though it is consistently upon the mystical, spiritually known God-relatedness of beings. The manifestations of the eternal Light, in and through spatial and temporal events, is very much to the fore in the Johannine theology, as well as in the exegesis of the neo-Platonist Augustine.

However, what we have said of the priority of the objective phase represented by light, and of the psychic immediacy of its entrance into consciousness, is true of the historic revelation of the Logos in its every phase. Confusion has arisen among Johannine scholars, through the premature desire to distinguish clearly, and to define rigidly, the interior-mystical and historico-theological "threads" of the literature. This confusion is avoided if the primordial "communication of attributes" be-

things are heard in the heart, nor was there any possibility for me to doubt thereof. Yea, more easily could I think that I did not live, than that Truth is not, which is clearly seen and understod, by means of the creatures which are made."

[43] Cf. *John*, i, 1-14. *Mysticism*, for the purposes of this essay, can be defined as "the realisation in consciousness of the immanence of the temporal in the eternal, and of the eternal in the temporal." This is an adaptation of Inge's definition, *Christian Mysticism*[2], p. 5. But in that realisation we must understand to be included "immediate apprehension of the divine or the ultimate ground of existence," provided that "immediate" connote psychic immediacy, and not psychological. This is an adaptation of Pringle-Pattison's definition, Baldwin, *Dict. of Philosophy and Psychology*[2], II, *s. v.* Cf. Butler, *Western Mysticism*[2], pp. 2 ff.; Garrigou-Lagrange, *Perfection chrétienne et Contemplation*, I, pp. 17, 298-321; Tennant, *Philosophical Theology*, I, pp. 306-332; von Hügel, *Mystical Element*, II, pp. 284-287; *Essays and Addresses*, I, pp. 131 f.; San Juan de la Cruz, *El primer Cántico Espiritual*, xxxiv, xxxviii. The important controversy about the different kinds of contemplation, the terms "acquired," "infused," "active," "passive," etc., and the reservation of the term "mystical," is of course irrelevant to the present essay. We are discussing something wholly prior to all such analysis, and define mysticism in accordance with our purpose and with current usage, insofar as such exists.

[44] *Conf.*, vii, 9.

tween the two is fully recognized. Primordially there are no "threads" in a pattern, but only shades of colour in a sheet of light, like the folds of an aurora. There is only one real thing: the penetration of the transcendent into the realm of experience. And wherever it manifests itself, whether in the heart, or in words and sacraments and institutions, *there* is mysticism; not as a "thread," not as a "strain," but as the very substance, modifying every phase through and through.

We may turn now to the biblical use of "light." It was said above that it represents the objective and psychic phases of faith, because it signifies the unreflective primordial intuition, of revelation in all its "modes," whether manifested in the heart within or in the glory of the face of Christ without. Light, indeed, has a subjective phase implied in its being seen, and truth its ontal condition.[45] Nevertheless, the biblical אור, φῶς, "light," with its associated images, is a sign, even, in different

[45] It should be clear that we are not equating this philosophic term, truth, with the NT ἀλήθεια, but only relating them. Cf. *supra*, footnote 18. Ἀλήθεια has *at least* an objective connotation which must be said to further *imply* truth in the sense in which we have used it, and hence to *imply* an actual subjective and psychological phase, in contradistinction from the objective and primordial psychic phase signified by light. Hence, again, we can conclude to the *presence*, and the at least implicit *insistence* upon the presence, of *both phases*, in the NT texts (provided that the philosophical and psychological principles presupposed by our terms have been certified). "Truth" is used above in the sense of correspondence of thought with reality. This brings us on to controverted ground, but we need neither commit ourselves to the implications of such a definition, nor discuss the subject further here. The provisional definition is sufficient for our purpose of calling attention to the implicit insistence on the subjective and psychological phase of that religious experience which contains faith, a phase which in turn implies insistence on *dogma* as *sine qua non* of the permanent assimilation of the primordial gift. It should be carefully noted, that our use of the term "implicit," and the expression "provided that the philosophical and psychological principles presupposed by our terms have been certified," vitiates the criticism that we are forcing the NT prematurely into a philosophic mould. *A fortiori* there can be no accusation of "reading in" preconceived notions. This will be obvious if notes 35, 40 are again recalled. For another, but suggestive and probably complementary, aspect of the discussion, cf. Jung, *Psychology and Religion*, pp. 52 ff., on the "defensive" rôle of dogma and ritual "against" immediate religious experience. But there is here some confusion, and the first parallel with true faith and understood dogma would seem to be in the confession of the true character of genuine experience. "He had to confess that the unquenchable fire was 'sacred.' This was the conditio sine qua non of his cure." *Ibid.*, p. 52. Cf. Gardeil, *op. cit.*, pp. 69-76.

ways and degrees, a " sacrament " of the " *given*," the theophany before which the biblical figures veil their faces and adore.[46] It remains for lawgiver, prophet or Messiah, to explain by words and signs, if no voice comes out of the theophany; and if these be absent, it is the recipient who reflects and judges, finite, fallible, guided only by the phase of light manifested. Nevertheless, the New Testament φῶς, especially in St. John, represents something " intelligible," and so known in the " intellectual " part of the soul. But it is also experienced in a more general, rich and primordially undiscriminated way, perhaps in some sense by the whole being whose eyes are opened by the grace of Christ. For it is clear that this Light of the world, with its elusive manifestations and phases, recurring throughout the New Testament, is far more than a didactic symbol for the spiritual, arrived at by " knowledge about " the significations of " light " and " spiritual." The text of the New Testament tells of a rich " acquaintance " with the two real things, the entrance of the one into consciousness bringing the other in its train as its unique expression. The whole has the marks of an unreflective mystic mode in consciousness, psychically immediate and so far unreduced to psychological powers and first principles. Nor do we here wish to analyse it and reduce it to exact theological terms, but we wish only to stress certain levels and phases in general terms (cf. *supra*, notes 35 and 40), as we did in the previous study of the " intellectual," " truth " phase of the New Testament πίστις.

There are, then, two main associated groups of notions clustered round the New Testament notion of faith. The " intellectualistic " we have already examined. The other, which is temporally and illatively prior, is that of manifestation, " light," and " truth " in its capacity as object in the relation which constitutes it. The Johannine experience is well seen in *I John*, i, 5: "And this is the message which we have heard

[46] Cf. *Gen.*, xv, 9-17; *Ex.*, iii, 2-6; xix, 16-25; xx, 18; xxiv, 10, 16; xxv, 2; xl, 34-38; *Isa.*, ix, 2; lx, 1-20; *Matt.*, xvii, 2-7; *Mark*, ix, 2-7; *Luke*, ii, 8-12, 32; *John*, *passim*; *Acts*, xiii, 47; ii, 2-4, 16-19; *Eph.*, v, 14; *I Pet.*, ii, 9; *I John*, i, 5; *Apoc.*, xxi, 23; etc.

from him and announce to you, that God is light, and in him is no darkness at all," ὅτι ὁ Θεὸς φῶς ἐστὶν καὶ σκοτία οὐκ ἔστιν ἐν αὐτῷ οὐδεμία. The stress is on the essence of the revelation of life, namely the progressive manifesting of God and the consequent growth of men in Him and into Him.[47] Revelation is summed up in the words " God is light." For light is the nearest earthly thing, *qua* sensible and *qua* associated with inexhaustible riches of religious signs and acts, to " that which was from the beginning, which we have heard, which we have seen with our eyes, which we have looked upon, and our hands have handled, of the Word of life," [48] considered, both historico-theologically and interior-mystically, as manifested in the soul of the mystic who wrote the epistle. There is here the same extraordinary spirit of eternal inevitable truth that we find in the Fourth Gospel, penetrating to the very ground of the world manifested there uniquely in space and time: an insistence upon the Flesh and the Blood, not because they profit anything, but because they are, from that hour to the end of the world, the Sacrament of the Transcendent Spirit.[49] On the Word in the world and the Word in the soul alike, St. John looks through the eyes of a mystic; as an inspired theologian, he finds language expressive of that at which, into which, and by which he is looking. The mystic and the theologian, the Light of the Word and the Word of the Truth that is Light, are phases of one real thing: Life.

There was a traditional background for the terms of expression. The book of Wisdom says of the *Hagia Sophia*, that

[47] Cf. Westcott, *The Epistles of St. John*[3], *ad loc.* Yet the words of John are themselves obscure without that light: "Adhuc lucem quidem nominavit, sed obscura sunt verba: bonum est nobis ut ipsa lux quam nominavit, illustret corda nostra, et videamus quid dixit." Augustine, *In Ep. Joannis ad Parthos*, Migne, *PL*, tom. xxxiv, *ad loc.* The frequent appeal of Augustine to the faith of his hearers and readers is so expressed that " truth " is for him a mere word, and a matter of words, without faith, whilst faith is far more than blindly willed assertion. For one of its conditions is an experience. His commentary on St. John is perhaps the supreme *explicit* exposition of the twofold phase of faith. Cf. *MPL*, tom. xxxiv, *In Joannis Ev., passim.*

[48] *I John*, i, 1. Cf. Frazer, *Adonis Attis Osiris*, pp. 103 f., 287 ff., 295 ff.; and the references *infra, passim.*

[49] *John*, i, 14; iii, 5; vi, 27-63; ix, 4-7; xx, 22-27; etc.

it is: ἀπαύγασμα φωτὸς ἀϊδίου, καὶ ἔσοπτρον ἀκηλίδωτον τῆς τοῦ Θεοῦ ἐνεργείας, " An effulgence of everlasting Light, and an unspotted mirror of the energy of God." [50] Indeed, the Jews, with many oriental peoples, associated sanctity with the idea of light, and this awe as of something holy is reflected in *Job*, xxxviii, 19. Moreover, in *Job*, iii, 16, and x, 22, it becomes a synonym for life, contrasted with the darkness of the womb and the shadow of death.[51] In *Isa.*, ix, 2 light characterizes the joy brought by the " Prince of Peace," and it is used in a number of ways in the Synoptic Gospels, of which one of the most significant for the present study is that of *Luke*, xvi, 8, where the spiritual knowledge of the children of light is contrasted with that of the children of this world.[52] *In II Cor.*, iv, 4-6, the illumination of Christ in the hearts of believers is compared to the Mosaic light of *Ex.*, xxxiv, 29-35. And the light is the experience of the believer, especially Paul himself. It conditions all he says. Allo, commenting on the passage in which the text occurs, implies much of what we have written about the objective and psychic phases:

> Thus " spirit " . . . which signifies " vital principle " or vivifying principle in a general way, signifies, when it is question of a written text as here, the living, profound, " existential " (as one would put it today) sense of this epistle. When this sense, as in the present case, is the revelation of a spiritual object which is a person, it is instinctively natural for one to pass, even without saying so, to the operative qualities of this person to whom the text introduces you, in order that his power be operative in you. This happens especially in a style as intuitive as that of Paul; for Paul is first intuitive and contemplative before being a dialectitian, and his whole dialectic—his " gnomic discourses "—is constantly being made to serve his intuitions—intuitions which he could not communicate directly to less contemplative minds.[53]

[50] *Wisd.*, vii, 26.

[51] Cf. F. H. Woods, 'Light,' Hastings, *DB*, iii, p. 119.

[52] Cf. *ibid.*; and Lagrange, *Évangile selon saint Luc, ad loc.*

[53] " Ainsi ' esprit ' . . . voulant dire ' principe vital ' ou vivifiant, d'une façon générale, signifie, lorsqu'il s'agit d'un texte écrit, comme ici, le sens vivant, profond, ' existentiel ' comme on dirait de nos jours, de cette lettre. Lorsque ce sens, ainsi qu'au cas présent, est la révélation d'un objet spirituel qui est une personne, il est instinctivement naturel de passer, même sans le dire, aux qualités opératives de

Plummer, commenting on verse 4, says: " The rapid sequence, ' see ' or ' dawn,' ' illumination,' ' good-tidings,' ' glory,' ' the Christ,' ' image of God,' shows how anxious St. Paul is to give some idea of the amazing brightness and beauty which was lost when unbelievers came under the power of Satan." [54] And on verse 6: " Here he seems to be desiring to tell, as in the narratives in Acts, the splendour of the vision. Christ was revealed to him in a glory that was Divine. When he speaks of having knowledge ' of the glory of God in the face of Christ,' he is speaking of what he himself has *seen*." [55]

In the prologue to the Fourth Gospel, life, light and truth are found characteristically together. Throughout the Gospel, Christ appears as " The Light of the world," as appealing to his hearers to walk in the light " while they have the light," to follow Him that they may " have the light of life," as " manifesting " himself to those who love Him and who are loved of the Father, and as " coming " and " abiding " with those who love Him and keep his words. Moreover, condemnation is for

cette personne avec qui l'intelligence du texte vous met en contact de connaissance, pour que sa vertu opère en vous. Cela se produira surtout en un style d'intuitif comme était celui de Paul; car Paul est intuitif et contemplatif avant d'être dialecticien, et toute sa dialectique, ses ' discours de gnose,' est mise sans cesse au service de ses intuitions, qu'il ne pouvait communiquer directement à des intelligences moins contemplatives." *Seconde Épître aux Corinthiens*, pp. 107 f.; pp. 104 f. should be read in connexion with what we have to say below, about the Shekhinah or overshadowing, indwelling of God on earth and in the soul. The *Fünklein* of Eckhart, goes back through the Pauline and Johannine mysticism, to the foreshadowing presence of the Shekhinah in the Mosaic Tabernacle. It cannot be without reason that the revealed immanence of Transcendent Spirit has driven the greatest mystics to express their experience in terms of light and fire. Paul especially fixes the signification of the first, when he traces its use back to the first creative word recorded, *II Cor.*, iv, 6: ' To the God who in the beginning said, Out of darkness light shall shine, we owe the light that has shined in our hearts . . . ." It is the first manifestation of God to conscious beings, and it endures through the history of his dealings with men, till the consummation in which ' the Lord God giveth them light ' (*Apoc.*, xxii, 5). Cf. Yahuda, *Language of the Pentateuch in its Relation to the Egyptian*, I, pp. 131-134; Suso, *Horologium sapientiae*, lib. i, c. xvi; Tauler, *Sermons, passim*; Kirk, *Vision of God*, pp. 102, 105, 211, 251, 323, 404, 464, 465; Levertoff, *Love and the Messianic Age*, pp. 28 ff., 36 ff.; von Hügel, *Mystical Element*, II, pp. 93 f.; Gardeil, *Le Donné Révélé*[2], pp. 136 f.; Butler, *Western Mysticism*[2], pp. 48, 52-56, 77 f., 108-112, 145-154, 201-205, 339-344.

[54] *ICC, II Corinthians, ad loc.* [55] *Ibid., ad loc.*

those who "loved darkness rather than light," after "light is come into the world," whilst eternal life is for those who believe:

That whosoever believeth in him should (not perish, but) have eternal life. For God so loved the world, that he gave (his) only begotten Son, that whosoever believeth in him should not perish, but have everlasting life. For God sent not (his) Son into the world to condemn the world; but that the world through him might be saved. He that believeth on him is not condemned: but he that believeth not is condemned already, because he hath not believed in the name of the only begotten Son of God. And this is the condemnation, that light is come into the world, and men loved darkness rather than light, . . .[56]

For men were in the darkness of ignorance: God indeed destroyed this darkness, sending light into the world that men might recognize the truth. . . . I am the light of the world: he that followeth me, walketh not in darkness, but shall have the light of life. . . . But that light came into the world, because man could not approach it: for He "inhabiteth light inaccessible, which no man hath seen nor can see" I Tim., vi, 16.[57]

Not to believe . . . is: not to adhere to the light, that is, to be in darkness.[58]

[56] *John*, iii, 15-19. The texts cited before this, are: viii, 12; xii, 35, 36; viii, 12; xiv, 21; and xiv, 23.

[57] "Homines enim erant in tenebris ignorantiae: quas quidem tenebras Deus destruxit, mittens lucem in mundum, ut homines cognoscerent veritatem . . . *Ego sum lux mundi: qui sequitur me, non ambulat in tenebris, sed habebit lumen vitae* . . . Sed ista venit in mundum, scilicet lux, quia homo ad eam accedere non poterat: nam 'lucem habitat inaccessibilem, quam nemo hominum vidit, sed nec videre potest': *I Tim.*, vi, 16." St. Thomas, *In Ev. Joannis*, c. 3, lect. 3.

[58] "Non credere, . . . est non adhaerere lumini, quod est esse in tenebris." *Ibid.* And Augustine on *John*, iii, 6-21, *MPL*, tom. xxxiv, *ad loc.*, should be read in its entirety. Cf. Lagrange, *Évangile selon saint Jean*[3], p. 87; and p. 89: "Le principe de ce discernement est l'avènement de la lumière mais, comme il a été dit dans le Prologue (i, 5), les ténèbres ne l'ont pas comprise, c'est-à-dire que les hommes—en plus grand nombre—ont même préféré les ténèbres . . . ." And Loisy, *Quatrième Évangile*[2], *ad loc.* The "given," "coming" character of light, should be compared with the use of the notion of "coming" in the Johannine theology. Cf. E. A. Abbott, *Johannine Vocabulary*, pp. 129-132; Lagrange, *op. cit.*, p. 12; Loisy, *op. cit.*, pp. 99 ff., esp.: "la diffusion de la lumière parmi les hommes étant liée à la manifestation du Logos dans la chair . . ."; Westcott, *The Epistles of St. John*[2], pp. 126 ff.: "The perfect (Ἐλήλυθα) serves to bring out the abiding significance of the fact of Christ's Coming, the necessary effects which it has as distinguished from its general issues. So St. John uses the tense in connexion with the testing power of Christ revealed as 'Light' and 'in flesh' . . . ."

Life, light and truth; rebirth, coming to the light and faith; are inseparably joined. The notion of the Word, the Λόγος, covers the one "trilogy"; the notion of purity of intention, implying the renunciation of works that are evil and the change from darkness of being to new life by a being whose "whole body" is "full of light," covers the other.

But the Johannine literature is an unrelieved monotone, or mere succession of beautiful images, if loving faith does not discover intuitively the all-pervading mystic signification of its signs. The Gospel of St. John has been called the charter of Christian mysticism,[59] and it is agreed generally that it contains a strong mystical "strain,"[60] which manifests itself in the attempts to break the limits of language in expressing what has been known in the inward depths.[61] Thus *John*, iii, 8, 11; iv, 14; vii, 37 f.; reveal the sense of the presence and movement of the divine, operative in the soul in a way only signifiable by this inspired language, requiring loving faith for its utterance as well as its understanding. The hunger to communicate the psychic whole in its purity and richness, and the knowledge that it cannot be communicated in its psychic immediacy but only in the results of psychological reflexion; these two facts help to explain the Johannine mysticism, and the Johannine theology in terms of the mysticism. There is neither neglect of the historic, nor tendentious suppression of the inward in face of the needs of *ad hominem* apologetics. The summary of Inge is balanced and his criticism of Harnack just:

> The stumbling-block to Harnack and others has been what some critics . . . have called the contradictory double theology of the Gospel. . . . But the Evangelist does not write or think as a philosopher. The supreme merit of his book as a Gospel is that he

[59] Inge, *Christian Mysticism*[2], p. 44.

[60] Cf. Howard, *The Fourth Gospel in Recent Criticism and Interpretation* (1931), pp. 197 ff. But note what we have already said above, pp. 75-76, on such words as "strain" and "thread."

[61] Cf. Augustine, *Conf.*, xi, 9; *In Joannis Ev., MPL*, tom. xxxiv, tract. i, 8, coll. 1388; *In Ep. Joannis ad Parthos, MPL, ibid.*, Prolog., coll. 1977, et tract. vii, 10, coll. 2033, 2034; St. Bernard, *Serm. in Cantica*, lxxiv, *MPL*, tom. clxxxiii, coll. 1141, 1142; Pseudo-Dionysius, *De Coelesti Hierarchia*, xv, 2, *MPG*, tom. iii, coll. 327-330; Plotinus, *Ennead*, vi, 9, 9, Ed. Budé, 47-61.

does not write the life of Christ as a Christian Platonist might have been tempted to write it, but keeps a firm hold on the historical Jesus, and on the concrete facts of His teaching. There is, undoubtedly, a double thread of the kind indicated. In some parts of the narrative we feel that 'tabernacled among us' is a truer description of the character of the Johannine Christ than 'became flesh.' There is an aloofness, a solitary grandeur, about the central figure which prevents Him from seeming fully human; while in other places there is an approximation to the Synoptic portrait. But it is only to the minute critic that these difficulties become apparent. To the religious consciousness of Christendom there has never been any hesitation in recognizing the profound agreement between the Synoptic and the Johannine presentations of Jesus Christ.[62]

More particularly, πιστεύειν is associated with φῶς, and the psychic and objective phases of faith, as follows:

It may be said to be conceived as implying a trustful coming to the light that is offered and dimly recognized, that we may rest in it, trust in it, and grow through and into what it contains and implies. Inge has said that faith begins with an experiment, and ends with an experience.[63] One would say, rather, a fuller experience, for the experiment is conditioned by a rudimentary one. Thus to believe, πιστεύειν εἰς, the Person, Christ, is not irrational, but is conditioned by his manifestation as Light, coming into the world as the glory of the only begotten of the Father.[64] Light represents preëminently the *mani-*

[62] "John, Gospel of," in Hastings, *Dict. of Christ and the Gospels*, i, p. 889.

[63] *Christian Mysticism*[2], p. 50. Cf. Heiler, *Das Gebet*[5], pp. 250 ff. In the text we qualify Inge's remark by adding "fuller" experience, and we should add "*adoration*." For there is much more, not emphasized in this essay in so many words, but presupposed to all we have said and pervading all; namely, "adoration." The end of faith is "adoration." True mysticism is inseparable from it; that is, from *worship*. Cf. Kirk, *Vision of God*, pp. ix f., and *passim*; von Hügel, *Mystical Element*, II, pp. 325-335; E. Underhill, *Worship*, pp. 7 f., 70, 163-170, 186-190; Heiler, *op. cit.*, pp. 290-309, 391 f.; Inge, *op. cit.*, p. 118.

[64] *John*, i, 14. Lagrange, *Évangile selon saint Jean*[3], *ad loc.*, brings together the doctrines of "indwelling," "light," "Logos" and the Jewish "Shekhinah," in commenting on this text. Especially important is: "L'intimité est indiquée par ἐν ἡμῖν, qui, d'après la suite, doit être restreint au groupe des disciples parmi lesquels Jésus a vraiment vécu.—Un lecteur étranger aux idées d'Israël n'aurait peut-être rien vu de plus dans ces deux mots. Mais Jo. n'a pas dû choisir ce mot de vivre sous la tente [ἐσκήνωσεν], à une époque où la vie nomade était restreinte du désert,

festation of God, the preëminent *motive* of credibility. Light is indeed the sign of spiritual illumination, joy and purity, but it contains as well the thought of self-communication.

God is Light. Not only is His splendour undimmed by any moral imperfection, any limitation of knowledge, but it is His nature and property to reveal and to communicate Himself. The idea of Light thus fringes on that of Love. Light must impart as Love must give, and the Prologue, which records the continued revelation to man through the Logos, culminates in the statement that the Word became Man, and by His Incarnate Presence completed and superseded all earlier manifestations.[65]

It embraces the whole economy of the divine self-communication, from the initial production of motives of credibility to the union in which, after the Dark Night of the Spirit and the Cross, the mystic can affirm with its profound signification: "*Dies Fünklein, das ist Gott.*"

Indeed, the Jewish doctrines of the *Shekhinah* and the *Memra* are brought together in the theology of St. John. Memra is the Word, and Shekhinah is the overshadowing, indwelling glory of the Lord. The root from which the word Shekhinah comes means "to dwell," or "to abide," and always underlies its use.[66] "The glory of the Lord, conceived of as a

si ce n'était précisément en mémoire de la présence de Dieu au milieu d'Israël. D'autant que cette habitation avait été manifestée par une nuée, dans le Tabernacle (*Ex.*, xxxiii, 7-11) et ensuite dans le Temple (*III Regn.*, viii, 10, 11), de sorte que la *Chekina*, 'habitation,' était une présence sensible de Dieu et une expression pour signifier Dieu." Cf. Loisy, *Quatrième Évangile*², pp. 105 ff., esp.: "L'évangéliste parle comme témoin oculaire de la vie de Jésus, . . .; mais, de son point de vue mystique, la vie terrestre de Jésus et la vie immortelle du Christ glorieux sont un même objet de contemplation . . .," in the context of what we said *supra*, p. 75. on the historic and interior phases of the Johannine mysticism. Cf. Goguel, *Introduction au Nouveau Testament*, tome ii, p. 482; Calmes, *Évangile selon saint Jean*, pp. 121 ff.; Westcott, *Epistles of St. John*², pp. 167 f.

[65] B. T. D. Smith, "The Johannine Theology," in *The Parting of the Roads*, ed. Foakes Jackson, p. 273. Cf. St. Thomas, *In Ev. Joannis*, c. 1, lect. 8; Augustine, *In Joannis Ev., MPL*, tom. xxxiv, coll. 138-1396.

[66] Oesterley and Box, *The Religion and Worship of the Synagogne*, p. 191. Cf. *Ex.*, xl, 34 ff., "The glory of the Lord filled the tabernacle," and the "cloud" *dwelt* (שכן) over it. Cf. Taylor, *Sayings of the Jewish Fathers*² ('Pirqe Aboth'), pp. 44, 154; Middleton, "Logos and Shekinah in the Fourth Gospel," *Jewish Quarterly Review*, xxix (1938), pp. 101-133; also the references cited, *supra*, footnote 46.

bright shining cloud, was the sign of the divine presence or indwelling. Thus the ideas of God's " glory " and of His ' indwelling ' are very closely connected; one was the earnest of the other, and ultimately they became identified." [67]

But, lest we be thought to teach a doctrine of psychologically immediate " vision," leaving no room for faith and credibility, it must be added that, " inasmuch as this *sign* of the presence of God was conceived of as something concrete, i. e., a cloud, it was in a certain sense differentiated from God Himself." [68] Thus, whatever theology makes of the assimilation of psychic immediacy by the Johannine mysticism, it is evidently not obliged to see psychological immediacy in this knowledge of the divine indwelling. In the Johannine theology there is no doubt implied a notion of psychic immediacy, but with it equally is implied the presence of a medium, namely the " sign " of the revealed immanence of the transcendent, which can, however,

[67] Oesterley and Box, *Religion and Worship of the Synagogue, loc. cit.* Cf. Bonsirven, *Le Judaïsme palestinien,* I, pp. 130 f.

[68] Oesterley and Box, *Religion and Worship of the Synagogue, loc. cit.* It must not, however, be conceived, especially in the Johannine context, as " material " in the sense of contradistinguished from spiritual. What we have said about premature discrimination of phases, should guard us against this. Loisy, in this immediate context, is good: " Le Logos ayant pris chair pour habiter parmi nous,—' nous avons vu sa gloire.'—La vue dont il s'agit (*ἐθεασάμεθα*) n'est pas un simple regard de l'œil corporel, mais l'intuition pénétrante de la foi illuminée, l'intelligence spirituelle de ce qui est apparu sensiblement, la vision profonde des réalités divines . . .; sa gloire a transpiré, pour ainsi dire, à travers l'enveloppe de son humanité. Les témoins de Jésus ont vu la gloire du Verbe incarné en tant qu'elle s'est manifestée dans les miracles, l'enseignement, la mort et la résurrection du Christ; tout croyant la voit dans la grace et la vérité qui lui viennent par la foi.' *Le Quatrième Évangile*[2], p. 106. Cf. Augustine, *In Joannis Ev., MPL,* tom. xxxiv, coll. 1395, 1396. Lagrange, *Évangile selon saint Jean*[3], p. 21, is in agreement, but his immediate apologetic purpose leads him to accentuate (with justice) the aspect of ocular witness. Lagrange says: " Ce qui ne veut pas dire qu'il ait vu des yeux du corps tout ce qu'il a compris. Mais la vue sensible était le point de départ," while Loisy has: " L'évangéliste parle comme témoin oculaire de la vie de Jésus, . . .; mais, de son point de vue mystique, la vie terrestre de Jésus et la vie immortelle du Christ glorieux sont un même objet de contemplation " (*op. cit.*, p. 105). Insofar as these two quotations touch our immediate context, the second expresses the desired emphasis, without in any sense denying the first. J. H. Bernard, *The Gospel according to St. John* (*ICC*), p. 21, is misleading, through making the clear-cut distinction against which we have been forewarned. But the essential doctrine of the Shekhinah and its glory is adequately stated on p. 22.

be left sufficiently undetermined as to include that participation of God which has been said to explain the insistence " avec laquelle les mystiques les plus autorisés affirment qu'ils ont, de la Divinité présente au fond de leur âme, une expérience directe (with which the best authorized mystics affirm that they have a direct experience of the Divinity present in the depths of their soul).[69] This " sign " is the glory of the only begotten of the Father, considered in its entirety before discrimination into " external " and " internal " motives of credibility, or into historico-theological and interior-mystical phases. Indeed, in this primitive gift, these four actualities are interpenetrative. For in the Johannine doctrine of the light of the indwelling presence, of the Shekhinah-Memra of the Lord, we must see implied the whole circle of manifestations of the Logos, whether " internal " and " mystical," or " external," " historical," " doctrinal," " miraculous," " prophetic." The whole gamut of " *motiva credibilitatis* " can and should, insofar as they represent the mind of the Chuch, be included. But there is much *more* besides, especially affecting the need of stressing that all-pervading mystical phase, which found expression, not all unworthy of the soaring spirit of St. John, in the Plotinian mysticism of Augustine and the purest streams of tradition to the present day.[70]

[69] A Gardeil, *Structure de l'âme et l'expérience mystique*[2], p. xv. Cf. *ibid., passim;* Butler, *Western Mysticism*[2], pp. lxii ff., 3 ff., 195 ff.

[70] As regards the spirit in the eastern schism, see Khomiakoff, *L'Église latine et le protestantisme.* Lausanne-Vevey: 1872; Zaïtzeff, *Saint Serge de Radonège,* in *Le Roseau d'or.* Paris: 1928; Boulgakoff, *L'Orthodoxie;* pp. 203 ff. Of the last are especially interesting: " La vie de l'Orthodoxie est liée à la vision d'autres mondes, et, sans cette vision, l'Orthodoxie n'existe guère. L'office divin contient, comme je l'ai indiqué plus haut, non seulement la commemoration, mais la réalité des événements célébrés. Le fidèle, à proportion le son développement spirituel, participe à la vie du Seigneur, de la Vierge et des saints, et, par cela, il communie aux choses du monde invisible " (p. 204); " L'Orthodoxie a la vision de la *beauté spirituelle idéale,* dont l'âme cherche à s'approcher. C'est le royaume céleste des idées, que déjà Platon avait contemplé; ce sont les images du monde angélique, le ciel spirituel (Gén., i., 1), qui se reflète dans les eaux terrestres. C'est un idéal religieux, plutôt esthétique, qu'éthique, idéal situé au delà du bien et du mal en tant qu'entités séparées. C'est la lumière qui éclaire le chemin des pèlerins sur cette terre. Cet idéal nous appelle au delà des limites de notre vie, il appelle à la transfiguration " (p. 214).

We may not be able to analyse reflectively to the full this Shekhinah of the Lord, but, whether we are able or no, it is the beginning of faith, the first condition of theology, and the end of love: the beginning of faith, because it englobes the " illapse " of the transcendent into the realm of experience, before which and without which we are as babbling infants and a people that walk in darkness and the land of the shadow of death; the first condition of theology, because no revealed premiss is other than a reflective explicitation of the implications of its content; and the end of love, because " Faith begins with an experiment, and ends with an experience," growing in the participation of light through the assimilative power of love.

" Light," therefore, from first to last, represents the objective and psychic phases of supernatural faith, entering consciousness with psychic immediacy, and hence showing its temporal and illative priority to reflective determination, represented by " truth " and the " intellectualistic," subjective, reflective and psychological phases. Mysticism is the beginning as well as the end of the works of Wisdom, and the most perfect and orthodox expression of the process of conversion remains that of Augustine:

In this beginning, O God, *thou didst make heaven and earth*, in the Word, in thy Son, in thy Power, in thy Wisdom, in thy Truth; speaking after a wonderful manner, and working after a wonderful manner. Who can comprehend it? Who can declare it? What is that, which so brightly shoots through me, and strikes my heart without hurting it? And I shudder, and I catch fire; I shudder inasmuch as I am unlike it, I catch fire inasmuch as I am like unto it. . . . Let him that can, hear thee discoursing within him; I will cry out boldly, in the word of thine oracle, *How wonderful are thy works, O Lord, in wisdom hast thou made them all*; and this Wisdom is that Beginning, and thou didst in that *Beginning make heaven and earth.*[71]

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[71] *Conf.*, xi, 9.

PROBLEMS FOR THOMISTS

I. THE PROBLEM OF SPECIES

(Fourth Installment)

V. DIALECTIC OF THE ISSUE

18. The procedure of stating and answering objections to a position immediately suggests a comparison with the method of the *Summa Theologica* and the *Disputed Questions*. That method is a model for all philosophical exposition. It is a perfect exemplification of the upward and downward dialectic, for it combines a showing of the steps by which principles are inductively reached with a demonstrative use of them in resolving the several issues raised by the question to be answered. Not only is the answer to the question demonstrated, but the objections to that answer are dealt with in the various ways appropriate to each. Sometimes the objection is simply refuted, but more frequently it is reinterpreted in such wise that the partial truth it contains can be saved and assimilated.

This exposition of the controversy between the two theories concerning species must deviate from the model for a number of reasons. In the first place, we are here concerned with arguments brought against each of two positions and, so far as possible, the rebuttal of them. In the usual mediaeval procedure, the writer is presenting one position, and meeting objections to it. The objections are considered in the light of the main analysis set forth in the *Respondeo*. The objections are not attacks upon that analysis directly, but are rather divergent or contrary answers to the main question; and these answers are made in the light of alternative analyses which are seldom as fully stated as the theory of the *Respondeo*. Our situation is different. It is as if, a question being proposed, two writers were to give contrary answers to it and each stated the answer given by the other in the form of one or more objections, to be considered in the light of his own *Respondeo*. But, obviously, such a mode of exposition would entail many repetitions. In order to avoid repetition, without sacrificing orderliness and adequacy, it will be necessary to consider the objections against each position separately and to note, for example, when objections against the second position depend upon premises in the opposing theory,

which are attacked by counter-objections, brought by the second position against the first. In all such cases, the main answer by the second position will be reserved until it can be expounded fully as an objection, when the time comes for considering arguments against the first position.

In the second place, the issue between the two theories is complex, involving a number of oppositions. There is disagreement about the number of species, the order of species and their constitution.[169] But to divide the whole question into a number of articles, each of which formulated a part of the total issue, would also lead to repetitions. Hence we shall consider in one sequence all the objections against a given position, even though they are not all on the same point or directed against the same thesis in the opposing theory.

In the third place, objections will be answered without the intervening and supporting materials of a *Sed Contra* and a *Respondeo*. This is the most striking difference between the exposition to follow and the usual procedure. The reason for this difference is that such material has already been amply presented in the preceding part of this article. There, in sequence, the first position and the second have been expounded and, in the course of each exposition, the major supporting texts from Aristotle and St. Thomas have been quoted or cited.[170] Nevertheless, it is true that these expositions have been inconclusive on one point or another and have sometimes lacked their ultimate argumentative force. Such defects can now be remedied, for the central argument will be developed either by objections or replies. In large part, however, the prior expositions will be assumed as underlying the formulation of objections or replies, as the materials of the *Sed Contra* and the *Respondeo* are usually assumed in the answering of objections. Some repetition will, of course, be unavoidable. Furthermore, when there is some clear authority on a difficult point,—especially an argumentative text that is unequivocal in its use of critical words,—it may be useful to appeal to it for whatever dialectical relevance it has.

The main difference between our situation and that of a mediaeval disputant is clear. The latter engaged in controversy because he was convinced of the answers that must be given to the questions proposed. He, therefore, attempted to demonstrate these answers and to defend them against attack, necessarily, of course, rejecting contrary answers in the process. The controversy which engages

[169] Vd. Part IV, Section 17, *supra*, for the summary analysis of the issue.
[170] Vd. Part IV, Sections 15, 16, *supra*.

us in the present instance arises from indecision on our part concerning opposing answers to questions about species. Instead of beginning with an answer, of which we are convinced and hence seek to defend, our ultimate aim and hope is to discover, by means of the controversy itself, whether we can be, and should be, convinced of one or another answer, whether one or the other is demonstrated, or approaches demonstration. To this end, we shall subsequently attempt to weigh the arguments *pro* and *con* in order to see if there is any preponderance of evidence and reasons in favor of the first or the second position. If such a judgment can be made, however tentatively and imperfectly, we shall be able to undertake a resolution of the question. This will have one great advantage: it will enable us to complete the dialectic by so interpreting whichever position has been rejected, that whatever truth it contains can be saved and assimilated. In this way all the phases of the upward and downward dialectic will occur somewhere in the parts of this article, though not in the usual order.[171]

Although the position which affirms that there are only five species, or some similarly definite small number, and that the order of species is strictly hierarchical, was expounded first, we shall begin the dialectic by considering the arguments against the second position, simply because this is the most economical and effective way to order the materials.[172] For the sake of brevity we shall continue to refer to the two theories as the first and second position, and to use the Roman numerals I and II for abbreviated reference.

19. *The argument against the second position.* The objections fall into three groups. The first group (Obj. 1, 2, 3) consists of those assuming some part of the first theory which is itself challenged by the second position. In each case of this sort, the challenge made in answering the objection will itself occur in objections raised by II against I. Hence it will be sufficient if II answers these objections simply by indicating the point in question. Should the first position later fail to meet such challenges, then II's present answer to these objections avails. However, should the challenge be successfully met, then retroactively we must judge that II's answers to these objections do not avail.

[171] The *Sed Contra* and *Respondeo,* as we have seen, occur in Part IV, Sections 15 and 16; objections and replies in the present Part, Sections 19 and 20; and after the weighing of *pros* and *cons* in Sections 21-23, the tentative resolution attempted in Part VI will not only complete the *Respondeo* of the favored theory, but carry out the work of reconciliation.

[172] There may be an additional reason for this order in that, so far as contemporary opinion is concerned, the second position is somewhat favored and hence its opponent has, rhetorically at least, the greater burden of proof.

The second group (Obj. 4, 5) consists of those which partly depend on the assumption of some thesis involved in the first position, and partly proceed on independent grounds. Such objections must be answered, accordingly, in a twofold manner.

The third group (Obj. 6, 7, 8) consists of objections which assume no part of the first theory, but attack II either in its own terms or in the light of those antecedent principles which supposedly are common to both I and II.

Objection 1. According to the principle of hierarchy, the evidence which II employs to distinguish many species of living and non-living substances cannot be so interpreted. For the properties which signify essential differences must be ordered as the essences they signify; and if contingent accidents are used to signify properties, they, too, must be ordered as the properties they are supposed to signify. But II distinguishes species by means of contingent accidents which are not related hierarchically. By a hierarchical ordering of properties, or of contingent accidents if these be used as specifying signs, the following is meant: let A and B represent two accidents, proper *or* contingent; if the inherence of A in a substance necessarily entails the inherence of B, *but not conversely*,—as, for example, is the case with rationality and sensitivity,—then A and B are hierarchically related; and only accidents so related can be used as specifying signs if the substances they help to specify are themselves ordered hierarchically. Since the species of natural substances are arranged in an ontological hierarchy, such that each infima species differs from another by an added perfection or its privation, it follows that the signs employed by II fail to specify substances. Hence there is no evidence for more than five natural species, or some similarly definite small number.

Reply Obj. 1. This objection assumes that I's principle of hierarchy is true. It can be admitted, of course, that properties must be ordered in the same way as the essences they signify; and the same can be said for contingent accidents if they are used as signs of properties. But the question remains: how are natural species ordered? The answer given by I, that they constitute a perfect hierarchy, can be challenged for two reasons: first, because it does not follow from the antecedent principles concerning the nature of species of composite substance; and second, because it is apparently advanced on the authority of ambiguous texts which can be otherwise interpreted. Hence, unless the proposition about hierarchy is thought to be self-evident, it must be demon-

strated. But it is clearly not self-evident. Hence it must be proved. If it cannot be proved, then this objection does not apply, and there is ample evidence to signify the distinction of many species in the genera of *element, mixture, plant* and *animal.* (The challenge on which this reply depends will recur as Objection 1 in the argument against the first position.)

Objection 2. There are only three souls, the vegetative, the sensitive, and the rational. Hence there are only three substantial forms in the sphere of living things, and this means that there are only three species of animate substance. But, according to the principle that higher forms are the principles of more operations than lower forms, it must follow that there are fewer substantial forms in the sphere of non-living things than among the animate. Hence, there cannot be more than five species of composite substance; from which it follows necessarily that the " species " enumerated and sometimes named by II cannot be species, but must be sub-species, however these be called, whether " systematic species " or " races " or " accidental concretions," etc.

Reply Obj. 2. This objection assumes that I's thesis concerning the number of souls is true. But this is open to challenge, for it is neither self-evident that the number of souls is three, nor does it follow as a conclusion from any of the antecedent principles. Furthermore, the proposition appears to be advanced on the authority of a few texts, the interpretation of which is questionable. Unless, therefore, this proposition can be proved, the objection does not apply, and there is no reason for saying that the kinds of living things enumerated and named by II are not truly species, even though they are species of *plant* and *animal,* for these are comprehensive genera, not infima species. (The challenge on which this reply depends will recur as Objection 2 in the argument against the first position.)

Objection 3. The strongest arguments which II advances for many species, inferior to the five generic forms, are those in which it employs modes of power as specifying signs. Thus, Aristotle distinguishes species of *element* in terms of different types of local motion (*De Caelo,* IV, 4, 5). But local motions are only accidentally distinguished according to the places toward which bodies tend. Hence, although the power of local motion may be the specifying property of elemental bodies, the modes of this power which are distinguished as tendencies toward different places, are

not species of local motion as a generic power, but accidental modes of a specific power. The same objection applies to the Aristotelian account of species of *mixture* in terms of accidental modes of blending among elemental qualities.

In the case of living things, modes of vital power are employed as specifying signs. Thus, Aristotle uses modes of vegetative activity, modes of locomotion and modes of sensitive operation, to distinguish species of *animal* (*Historia Animalium*, I, 1-6). But the differences in locomotion, for example, which are due to differences in the organs, such as feet or fins or wings, or the number or type of feet, or correlative differences which relate to the locale of locomotion, such as land or water or air, do not constitute species of the vital power called locomotion. They are merely accidentally distinguished modes of a specific power. The same argument applies to the differences in any sensitive power which are due to the character or disposition of the organ, e. g., the structure of the eye or the ear. It applies similarly to differences in the vegetative powers which are due to the material organization of the bodily parts in which these powers are incorporated. Hence, to say, as Monaco does, that in such matters as nutrition, augmentation, or generation, differences in organic structure reveal differences of power (*Praelectiones Metaphysicae Specialis,* Pars II, Cap. I, Art. V), is to confuse accidental modes of one and the same specific power, with the specific differentiation of a generic power. The types of vegetative activity found among plants and animals, and the types of locomotive and sensitive activity found among animals, are merely accidental modes of operation which fall within a specific power, differing according to the differences in the material disposition and structure of the functional organs in which that power is embodied. Since modes of operation, thus accidentally distinguished by reason of material differences, are not species of power, they are only contingent accidents, and not properties; and, therefore, they are no different from, or better than, such other contingent accidents as figure, color, size, etc. as specifying signs. The previous objection to specifying signs of this sort (vd. Obj. 1), namely, that they are not related hierarchically, therefore applies here as well. On the evidence as offered, neither living nor non-living substances are properly specified by reference to such accidentally distinguished modes of operation, for these accidents are not themselves ordered hierarchically.

There is one further point. Aristotle and others proceed as if differences in vegetative activity,—modes of nutrition, augmenta-

tion, and reproduction,—could be employed to differentiate species of *animal*. But this is impossible, even if such modes of operation gave rise to essential distinctions in power, because if *animal* is generically distinct from *plant* by reason of its sensitive powers, it cannot be further specified by reference to accidental modes, or even species, of its vegetative powers. Thus, St. Thomas in explaining why *man* as an infima species cannot be further essentially differentiated, says that *man* is distinguished by intellect, and since intellect does not have a corporeal organ, intellective beings cannot be differentiated according to diverse combinations of organs (*In De Anima,* II, 5). By similar reasoning we must conclude that since *brute animal* is distinguished by sensitive powers, further essential differentiations cannot be made by reference to the organs or modes of vegetative operation. Hence the point made by Monaco that diverse types of reproduction,—generation being the chief among vegetative powers,—" can be taken as a note altogether characteristic of any specific form " (*loc. cit.*), does not apply at all to animals; and, it must be added, neither does it avail for the specification of plants, if the types of reproduction are merely accidentally different modes of operation arising from different organizations and disposition of matter.

Reply Obj. 3. In addition to assuming the thesis concerning hierarchy already challenged, this objection further assumes a thesis concerning powers as the only properties of composite substances, and other propositions about the nature and number of powers, such as the criteria by which powers are themselves specified, and the way in which the number of vital powers, for example, are related to the number of souls. Hence the same reply can be made here as in the case of the prior objections making similar assumptions. These assumptions must be justified, or the objection does not hold. (The challenge on which this reply depends will recur as part of Objection 2 in the argument against the first position.)

The objection can, however, be answered in other ways. It can be admitted that the various types of operation which are used as specifying signs indicate merely accidental modes of power and are themselves nothing but contingent accidents. Nothing follows therefrom, for it is maintained that, for the most part, we know only the accidents of species and do not attain to a knowledge of their properties; yet such knowledge of accidents is sufficient to enable us to know *that* this and that are different species, even if we are not able to know *what* their essential natures are *quidditatively*.

We can even admit the point about the use of modes of vegetative power to specify animals. Such procedure would be erroneous if we supposed that we were dealing with true properties. But since that is not the case; since, on the contrary, we merely say that two kinds of animals are specifically distinct if we can discover, even among their contingent accidents, any constant and uniformly present attributes, the objection based upon this point does not apply. Thus, if one sort of animal breeds viviparously and another sort oviparously, that is sufficient to distinguish them specifically, even though the difference used cannot signify something that is an essential constituent of their specifically different natures. To argue, furthermore, that such contingent accidents as modes of operation are not related hierarchically is, of course, to beg the whole question about the hierarchical ordering of species.

It should be said also that Aristotle and St. Thomas treated the qualities of elements and mixtures as if they were proper, not contingent, accidents (*Summa Theologica*, III, Sup. 79, 1, ad 4). In other words, elements were not distinguished merely by their modes of local motion but by their primary, simple qualities. It cannot be argued that these qualities are not properties, because they are related as contraries rather than hierarchically, without again begging the whole question about the hierarchical ordering of species.

Finally, it must be added that the objection fails to take account of the best differentia which the second position employs in the case of animals, even though the main tenor of the objection pretends to do so. Thus, John of St. Thomas speaks of the differentiation of animals according as they possess locomotive power in addition to sense and appetite (*Phil. Nat.* P. IV, Q. 1, A. 4; cf. St. Thomas, *Summa Contra Gentiles*, II, 95), and certainly locomotion is a generic power, so classified along with other generic powers, such as the vegetative, the sensitive, and the intellective. Hence, according to the principles of the first position, it must follow that *animal* as a genus subsumes at least sub-genera, which are specifically distinct, and which are traditionally called imperfect and perfect animals. Furthermore, as Gredt points out, further specific distinctions can be made by reference to the species of the generic sensitive power, for " animals which are endowed with only taste and touch (and smell) are specifically distinguished, as natural species, from those in which sight and hearing is found " (*El. Phil. Arist.-Th., Phil. Nat.* B., Pt. III, Bk. III, #611). And if one were to add distinctions drawn from the various interior powers of sense, an even greater number of specific differentiations could be made. Hence

it follows that even if one were to admit, for the sake of argument, all the principles postulated by the first position,—such as hierarchy and differentiation by powers,—there would be many more species than five, for there are clearly many hierarchically ordered species in the one genus of *animal,* each higher or lower than another according to a specific power possessed in addition to others, or lacked. (These matters will also recur in Objection 2 in the argument against the first position.)

Objection 4. The principles in terms of which substances and accidents are specified must be different; for, in the first place, *essence, species* and *definition* are said analogically and not univocally of substance and accident; and, in the second place, accidental species can be *contrary* to one another within the same genus, whereas substantial species cannot. But, according to the second position, substances are found in species and genera in the same way that accidents are classified: two or more substantial species participate in a common genus, to which each adds a diverse determination in a respect in which the genus is indeterminate, through which addition the species are said to differ from the genus directly, and indirectly from each other by reason of the diversity of these differences. And this is precisely the way in which such accidents as color or shape or artificial forms are classified according to species and genus. Hence it must follow that II is employing false principles of specification in classifying substances, for otherwise the two classifications would not be the same.

Reply Obj. 4. This objection requires us to consider the difference which the first position supposes to exist between the order of substances and the order of accidents, according to genera and species. According to I, there are no common generic natures in the substantial order, and that is the principal difference between substance and accident in this connection. It is supposed that whereas two species of accident can both participate in one and the same proximate generic nature, two species of substance cannot, because either one of these two is a species proximately inferior to the other, in which case it is also its proximate genus: or a species inferior to them both is a generic form with respect to them both, but then not in the same degree of proximity. But all of these suppositions depend for their truth upon the principle of hierarchy itself, which remains to be proved. Hence this objection is answered by the same challenge which has already been made in meeting prior objections involving the same assumption.

It can, however, be answered in another fashion. The objection appeals to the principle that substances and accidents have *essence, species,* and *definition* analogically, and not univocally. But this principle, the truth of which is admitted, does not require the relation of species and genera to be radically different in the two orders of being. Species of substance can participate in proximate, common genera, and differ from these genera by diverse determinations, in the same way as species of accidents are in their genera. This seems to be the opinion of Aristotle in *Meta.* X, 8, 9, where he says that a difference in species must be a contrariety, and contrariety must occur within a single genus; nor does he limit this to accidental species. The principle of analogy is sufficiently respected if it be said that *genus* and *difference,* as well as *essence* or *species,* are analogical and not univocal when they occur in the two orders.

Objection 5. The logical and ontological orderings of species and genera must be different in the case of substances, though not in the case of accidents, because the logical status of a genus is not the same as the ontological status. In other words, a logical hierarchy is constituted by genera, common to two or more species, which genera are in turn species participating in higher genera, and so forth. The limits of such a hierarchy are found in summa genera and infima species, and at every level except the highest and the lowest, each term is both a genus common to two or more species, and a species sharing with other species in the nature of a common genus. But ontological hierarchy is radically different. Not only are there no common, proximate generic natures for any two species, but every species is an infima species; each except the highest species is involved as a generic nature in the constitution of its proximate superior; and each except the lowest species differs directly from its proximate inferior by a specifying determination, i. e., an added perfection. Since the second position fails to recognize any distinction between logical and ontological hierarchy, its ontological specification of substances must be based upon erroneous criteria.

Reply Obj. 5. This objection, like the immediately preceding one, has no force unless the principle of ontological hierarchy, upon which so many of I's arguments depend, is firmly established. It remains to be shown, not only that the classification of substances and accidents according to species and genera, must proceed in a radically different manner, but also that, in the sphere of substances, ontological hierarchy is radically different from the

hierarchy set up by logical analysis. The chief point at issue is the one concerning "common genera." That has already been sufficiently challenged.

Nor is it true to say that the second position fails to recognize *any* distinction between the ontological and the logical, for it insists, as emphatically as the first, upon the difference between first and second intentions, between the consideration of existences and of ideas. It does not follow, however, that these two modes of consideration cannot run parallel to one another, the latter reflecting in the ideal order what obtains in the sphere of the real. Hence there is no reason, in the acknowledged distinction between the intentions, why the hierarchy of substances should not *exist* in the same way in which it is *pictured* by the logical analysis of species and genera. The actual classifications made by the second position cannot, therefore, be said to be objectionable, because, for example, *animal* is a genus subsuming species, such as the imperfect and perfect animals, which in turn are genera subsuming species, such as animals with few senses or animals with more, which in turn are genera subsuming species distinguished by other traits, and so on until infima species are reached, such as *cow* or *horse* or *man*.

Objection 6. The second position is forced to use the word "species" equivocally, as the first is not. It treats *man* as a species of animal, and also *cow* and *horse*. But *man* is not a species of animal in the same way *cow* and *horse* are, for *man* differs from all other species of animal, as no one of these differs from another. All other animals are said to be irrational, and as such they belong to the genus *brute*. *Cow* and *horse* are species of brute, and hence of animal; from which it follows that *man* is not a species of animal in the same way that *cow* and *horse* are, since they do not differ from each other as *man* differs from them both, nor do they differ from *animal*, as *man* does. This is further indicated by the fact, which Maritain observes, that whereas "rational" names a specific difference on the part of *man*, "irrational" names a generic difference on the part of *animal* (*Degrees of Knowledge*, p. 253, fn. 1). But "irrational" names the privation of rationality; it is the same difference as that named by "rationality," except that the prefix "ir" indicates the perfection lacked by the proximately inferior species, namely *brute*. But if *man* is an infima species, then its proximate inferior, *brute*, must also be an infima species, for one infima species differs from another by the addition or subtraction of a difference,—the possession or privation of a perfection. From all of which it follows that either *man* is not

an infima species, but a genus like *brute*, or if *man* is an infima species, then so is *brute*, and *cow* and *horse* are not species in a univocal sense of the word. Since the second position agrees with the first in affirming the truth that *man* is an infima species, it must deny that *brute* is a genus, and in calling such kinds as *cow* and *horse*, or even *sponge* and *oyster*, species of brute animal, it is forced to use the word " species " equivocally.

Two further points must be noted: first, that the force of this objection does not depend upon the question whether such kinds as *cow, horse, oyster, sponge,* are infima species rather than genera, since the objection argues that if *man* is an infima species, *brute* must also be an infima species, in order to avoid equivocation; and second, that the second position is compelled to equivocate, if it continues to affirm that *man* is an infima species, because unless it continues to regard *brute* as a genus, it will find itself in agreement with the first position. To disagree it must equivocate on the word " species." But since equivocation of this sort is an error that must be avoided once it is recognized, we cannot but hope that pointing out this crucial equivocation will lead the second position to agree with the first.

Reply Obj. 6. The difficulty which the objection makes manifest is more apparent than real. It is true that *man* differs generically from *brute* and is at the same time an infima species. It follows, therefore, that *man* is not a species of *animal* in the same way that *horse* and *cow, sponge* and *oyster* are,—treating these, for the sake of argument, as if they, too, were infima species. But " not in the same way " does not mean that the word " species " is being used equivocally. The difference is with respect to the level of the hierarchy in which *man* and *cow*, for example, occur: thus, *man* is an infima species of *animal* on the same level as *brute* which is, at once, both a species of *animal* and not *infima*, because it is also a genus including many subordinate species; in fact, there are many subordinate genera, such as *vertebrate* and *mammal*, before one comes to *cow* as infima species. The fact that *cow* and *man* are not on the same level of the hierarchy in the genus *animal* does not prevent them both from being infima species, without equivocation. The reason for the apparent difficulty here is that *man* is at one and same time an infima species and located at the highest sub-generic level within the genus *animal*. In this respect, *man* is unique,—a nature which, in one respect, is of generic character and yet, incapable of any further essential differentiations, is also absolutely specific.

If the case of *man* were omitted from the discussion, the objection could not be sustained at all, for there is no other instance of similar *apparent* equivocation in the use of the word "species" by the second position. In every other case, all infima species are on the same level of the hierarchy of natures; no other is on that lowest level in one respect and on a higher generic level in another. But, of course, the case of man cannot be omitted from the discussion, and still it must be said that equivocation has not really taken place, though from a certain point of view it may so appear. The uniqueness of *man* in the hierarchy of natures does not require us to alter the structure of that hierarchy. It is worth noting, however, why the objection seems to think that the unique case of *man* has that peculiar force. It is simply that the objection assumes, more or less tacitly, a conception of hierarchy in which there are only infima species and no common genera, a conception of ontological hierarchy as radically distinct from logical hierarchy. If that conception were admitted, the whole force of the objection would be unavoidable. But here, as previously, that mode of argument is challenged as a begging of the question. If the hierarchy of natures is not so conceived, but is regarded as it has been in the course of this reply,—as an order which logical analysis represents without distortion,—then it follows that *man*, *cow* and *oyster* can be called infima species of animal without equivocation.

Finally, it must be said that the foregoing reply suffices to answer the objection, even though on the level of infima species we are not able to order such kinds as *horse* and *cow* as higher and lower than one another in perfection of being. While agreeing that *man* is clearly higher than *brute*, we no not necessarily agree that every infima species is higher or lower than another in this way. Two possibilities are conceivable: either that some infima species are coordinate in their proximate common genera,—that is, neither higher nor lower in perfection of being,—even though some genera are clearly not coordinate in this way; or that our ignorance of the essential natures of the infima species we are able to classify prevents us from ordering them as higher and lower, even though in fact they are not coordinate. The first possibility is thoroughly consistent with all of the antecedent principles which we have accepted, though, of course, it is denied by the theory of ontological hierarchy which is central to the first position. The first possibility is, furthermore, urged upon us by our acceptance of the rule that specifying signs must be related in the same way as the essences they specify. Though we classify most infima species in terms of contingent accidents, we are nevertheless ob-

liged by this rule to regard the species they have been used to distinguish as coordinate if these accidents, as specifying signs, are themselves coordinately distributed. That being the case, the first alternative is the more probable position. It is not more than probable however, and the other alternative is not totally excluded, because our inadequate knowledge of the specific natures we have distinguished and classified requires us to be tentative. In fact, we are seldom sure, except in the case of *man,* that any kind of *plant* or *animal,* is an infima species. Nor is such certainty necessary for the second position, which is satisfied to make two assertions: first, that *plant* and *animal* are genera, subsuming many species; second, that such kinds as *sponge* and *oyster, cow* and *horse,* are natural species, i. e., essentially distinct, even if they are not infima species.

Objection 7. The second position definitely violates one of the antecedent principles, namely, that " species are discrete and integral forms, not subject to the qualification of more and less, and not related *inter se* as contraries are in a common genus " (vd. Part II, Section 8, *supra*). This principle not only has the unqualified authority of Aristotle (*Categories, 5*) and St. Thomas (*Summa Theologica,* I, 50, 4, ad 2; I-II, 72, 8, ad 1); but its truth is made manifest by the absurdity which results from its denial, namely, the obliteration of the distinction between substantial and accidental forms. Further, it is said in *De Ente et Essentia,* that " degrees of perfection in receiving the same form do not diversify species, as something more and less white participating in the same kind of whiteness; but different degrees of perfection in the very forms or natures participated do diversify species " (Ch. V).

This principle requires us to view the species of substance as integral units, between which there are no fractional terms. And one integer cannot be the contrary of another, therefore, in the sense in which contrariety exists between terms in a graded series, either the extremes of the series or intermediates. Substances can be said to be " contrary " only in the sense of privative opposition, whereas accidents are contrary directly as an opposition of forms. We are here considering the contrariety of forms, not of form and privation. Unless the second position denies that essences are related in the same way as their specifying signs, it cannot avoid the charge that it has related substances as accidental contraries, in the case of elements and mixtures, and as varying in degree, in the case of some mixtures, and also in the case of plants and animals with respect to certain traits. For the simple qualities which are

used to specify the elements are said to be contraries; and the qualitative blends which are used to specify mixtures are not only said to be contraries but also to differ in degree from one another. Hence the species of *element* and *mixture,* which are thus distinguished, are related as contraries and as varying from one another in degree. But this violates the principle. Similarly, in the case of *plant* and *animal,* some of the traits used to distinguish species are possessed by the several kinds although not in the same degree. Hence the species thus distinguished must be regarded as varying in degree. But this violates the principle.

It follows, therefore, that the second position must admit either that it denies the integrity of species, and essential natures, or that many of the signs it has employed as grounds for specification cannot possibly be so used. If it choose the first alternative, the very meaning of " species," as a kind essentially distinguished, is lost; if it choose the second alternative, it must relinquish all claim to having established specifications of *element* and *mixture*; and, in the case of *plant* and *animal,* it must concede that many of its specifications are questionable.

Finally, notice is served that this objection does not depend in any way on the assumption of an ontological hierarchy as radically distinct from a logical one. For the objection agrees to what is said in a prior discussion of the antecedent principle about the integrity of species (*loc. cit.*), namely, that this principle is compatible with two possibilities: 1) " that the order of species is a hierarchy of higher and lower forms, as the integral numbers are serially ordered "; 2) " that the species of substance are merely like a set of integers, considered as coordinate rather than as serially ordered." In other words, so far as the leading principle is concerned, species may be coordinate, but they cannot be related as contraries of one another, nor can they differ from one another by fractional variation, i. e., by degrees.

Reply Obj. 7. The second position does not deny the antecedent principle cited in the objection; nor does it seek to avoid the rule that the relation of essences be regarded according to the relation of their specifying signs. But it holds that the rule can be followed with certainty only in the case of properties as specifying signs. When, as is our situation generally, we are ignorant of properties and must be satisfied with contingent accidents in their place, we are sometimes not able to abide by the rule perfectly; that is, we must sometimes employ accidents, as grounds for specification, which are related *inter se* as contraries or which

vary from one another merely in degree. This gives rise to an apparent contradiction of the principle, as the objection notes; but it is only apparent and due to the inadequacy of our knowledge. In other words, we do not know enough about the nature of the species we have classified by means of extrinsic and probable signs (contingent accidents) to place them in any order definitely. We simply know that these signs show this kind and that to be specifically distinct. And this, as the objection itself admits, is consistent with the antecedent principle, for one of the two possible alternatives before mentioned was: "that the species of substance are merely like a set of integers, considered as coordinate rather than as serially ordered." Hence, the specifications we have made cannot be considered wrong, in terms of the antecedent principle, simply because they fail to order species as higher and lower in every case.

Furthermore, although it is true that Aristotle and St. Thomas considered the simple qualities of the elements and the qualitative blends of the mixtures as *proper* accidents (*Summa Theologica,* III, Sup. 79, 1, ad 4), that must now be regarded as an error which was caused by the defective physical science of their day, and by their inability, at the time, to distinguish between the domain of natural science and the philosophy of nature. Hence we must not suppose that the Aristotelian and Thomistic treatment of elements and mixtures, in which their properties are said to be contrary and in which even the elements are said to be contrary to one another, is, *as stated,* an essential part of the second position. It must be taken merely as an indication that the ancients held to a view of many species of *element* and *mixture.* Beyond that we must look to modern physical science to furnish the philosopher of nature with a better set of extrinsic and probable signs by which he can today determine the specifications to be made in the sphere of non-living things. As Maritain says, "the doctrine of hylomorphism is as true to-day as it was in the time of Aristotle; it is its vocabulary and its exemplifications which have worn out, not its substance; only the four elements of the old world have been replaced by the ninety-two elements of Mendeljeff's table, which correspond to very different scientific notions" (*Degrees of Knowledge,* p. 220).

Finally, the objection lacks force in the case of living things when it refers to the fact that some, not all, of the specifying signs there used are traits possessed commonly by two species, but in different degrees. For one species is seldom distinguished from another by a single trait; if, as usually, the distinction is made by an aggregate of traits, only some of which are subject to variation in degree, then

the force of the objection is considerably weakened, if not entirely lacking, on that count alone.

Objection 8. The second position looks to the findings of scientific biology for aid in the specification of living substances. Thus, Gredt, having said that "we must necessarily consider brute and plant as supreme genera, which are further divided into diverse natural genera and species," adds that "it belongs to biology and not to philosophy to determine what these genera and species are" (*op. cit., Phil. Nat.* B, Pt. III, Bk. III, #611). Maritain speaks similarly of the philosopher of nature depending on the natural scientist for the empiriological signs by which the diversity of species is known (*op. cit.*, pp. 216-7, 253-4).

But the scientific evidence is of a contrary tenor. It tends to show that natural things differ accidentally from one another, and not essentially. Thus, in the sphere of non-living things, the empirical signs by which physics and chemistry classify and distinguish bodies point to their arrangement in a quantitative continuum. The indices by which the elements are ordered in the atomic table are subject to the same objections as the contrary qualities employed in the Aristotelian classification. Moreover, as Descoqs has observed, there is evidence from physical chemistry which appears inconsistent with the traditional account of material substances, especially the unicity of substantial form (*Essai Critique sur L'Hylémorphisme*, Ch. III). This inconsistency is partly due to the supposition that there are diverse species of *element* and *mixture*.

And in the field of living things, the contrariety of the evidence is even more striking. The criteria by which the biological sciences,—especially experimental genetics,—differentiate plants and animals reveal that what the biological systematist calls species and genera are no less accidental classes than races and varieties. In fact, all of the systematic classes which comprise the "hierarchy" of living kinds,—from races and species up to orders and phyla,—are constructed in such a manner that the philosopher of nature could not regard them as "natural species." The evidence in terms of which these classes are distinguished includes evidence in terms of which it is known that they are mutable through the operation of secondary causes in the succession of generations. As Darwin foresaw, the system of biological classifications must ultimately become genealogical (*Origin of Species*, Ch. XV), and this is borne out by the most comprehensive survey of the researches since his day (vd.

Dobzhansky, *Genetics and the Origin of Species*, Ch. X). But, according to Gredt, the primary criterion for distinguishing between natural and systematic species is the absolute stability of the former, and the relative instability, i. e., mutability, of the latter (*op. cit.*, Pt. III, Bk. III, #611). Hence, the findings of experimental science cannot help the philosopher to distinguish natural species in the sphere of living things.

In short, far from supporting the philosophical contention that there are many natural species and genera, the facts established by physical and biological science tend to support the opposite position, namely, that there are no essential distinctions subordinate to such forms as *element* and *mixture, plant* and *animal*. It is not merely that our knowledge here is entirely in terms of extrinsic and accidental signs, rather than properties; but that all of the signs which can be gathered from scientific evidence indicate that the *kinds* which science distinguishes are " systematic " rather than " natural," as these words are understood by the philosopher. Hence the philosopher who wishes to hold the second position concerning species must either deny the implications of the scientific evidence, or at least admit that he cannot look to science for help. If, however, as we have seen, he admits that he cannot determine the subordinate kinds in their specific diversity without the help of science, that is tantamount to saying one knows that such a specific diversity exists, without knowing *in any case* whether this and that kind are specifically distinct. It is impossible to argue from ignorance in this way. We may not know *what* the essence of X or Y is in a quidditative fashion, but unless we know *that* X and Y are essentially, i. e. specifically, distinct, we cannot argue that there exists a specific diversity in the sphere of things in which X and Y are exemplary terms.

Reply Obj. 8. It is not necessary to deny the facts or evidences which the various natural sciences attest, but it is necessary to deny implications which the scientist, *as a scientist*, draws from his findings. Scientific facts and evidences must be philosophically interpreted if they are to yield their philosophical significance, for such matters as " substance," " species," " essence," " accident " and so forth, are not part of the terminology of scientific thought. As Maritain remarks, " it is for philosophy, not science, to establish a fact whose formulation implies the notions of substance, nature, species, etc., metaphysically understood " (*Degrees of Knowledge*, p. 220); " scientific facts are incapable of producing any philosophical decision, but the rightful penetration

of these objects . . . can release in them the philosophical content with which they are pregnant" (*op. cit.*, p. 219); "it is an illusion to believe that any appeal to scientific facts with no higher perception turned upon them can ever nullify a philosophical assertion, such as, for example, hylomorphism" (*op. cit.*, p. 72). For these reasons Maritain rejects Descoqs' *Critique*, in so far as it fails to submit scientific facts to a strictly ontological interpretation before using them as relevant to the fundamental principles of hylomorphism (*La Philosophie de la Nature*, Ch. III, Sect. 29-31).

In the same way it must be said that the philosopher does not expect the scientist to determine the essential kinds which constitute the specific diversity among living and non-living things. That the scientist cannot do. He serves the philosopher only by providing material for analysis. What we contend in answer to the objection is that these materials, when illuminated by the formal principles of philosophical analysis, help us to determine natural genera and species, such as the various elements and mixtures, the many kinds of plants and animals.

It is recognized, of course, that scientists, speaking beyond their competence in a quasi-philosophical manner, ofter draw implications from their findings which are incompatible with philosophical truths. But the incompatibility is only apparent because the implications have not been validly derived, i. e., they are instances of the "bad philosophizing" in which scientists sometimes indulge. If the objection takes such bad philosophizing seriously, as contradicting the position that there are numerous natural species subordinate to the generic forms, *which it supposes to be infima specific*, then it cannot avoid suffering from the same causes, for many scientists take their facts to imply that there are no essential distinctions *of any sort*; in other words, that the distinction between living and non-living, or between animal and plant, is as accidental, as much a relative matter of degree, as the distinction between rose-bush and oak-tree, or between snail and tiger. If, however, it be maintained by the first position that scientific evidences show no such thing when they are properly interpreted, then we can answer the objection, in the same spirit, by saying that although the biological scientist, for example, regards all of his species and genera as equally *systematic*, we are able, nevertheless, to extract from his systematic classifications the signs whereby to determine truly *natural* species and genera.

20. *The argument against the first position.* The objections fall into three groups. The first group (Obj. 1, 2) are those which chal-

lenge theses indispensable to the first theory concerning species, requiring that they be proved. These challenges have already been anticipated in the replies to certain objections which I has raised against II.

The second group (Obj. 3, 4) consists of those which argue from the evidences,—the observed facts, scientific or otherwise,—the same body of evidence which II appeals to in affirming a large specific diversity among natural things.

The third group (Obj. 5, 6, 7) are those objections which point out inconsistencies within the first theory, which are thought damaging to its validity.

Objection 1. As already said (in Reply Obj. 1 contra II), the principle of hierarchy is neither self-evident nor does it plainly follow from the several antecedent principles which we have accepted as a true statement of hylomorphism in its bearings on the problem of substantial species. By the "principle of hierarchy" here is meant the notion of a hierarchy of substantial natures, all of which are infima species, each higher or lower than another in grade of being; in such a hierarchy, it is claimed, there are no proximate common genera. There are other conceptions of hierarchy, but this is the notion upon which the first position rests its contention that there are only five natural species, or some similarly definite small number. It claims to derive this notion from certain texts of Aristotle (*Metaphysics*, VIII, 3) and St. Thomas (*Summa Theologica*, I, 5, 5; 118, 2, ad 2; I-II, 51, 1); but it will not suffice to appeal to authority on this matter, especially since there are other texts in St. Thomas which call for a contrary interpretation with respect to hierarchy (e. g., *Summa Theologica*, I, 47, 2; *QQ. Disp. de Anima*, 1, 7).

Such statements as "formal distinction always requires inequality," or "species are related as integral numbers, each greater or less than another by the addition or subtraction of a difference" are not themselves self-evident. Nor do they, even if true, necessarily entail the notion of hierarchy as the first position expounds it; the inequality of species, for instance, is not incompatible with participation in a common generic nature. Hence, not only must the truth of such statements be shown, but also whatever goes beyond such statements in the first position's theory of hierarchy.

Furthermore, it would appear that the first position tries to rest its case on a questionable interpretation of the fundamental truth that the essence of a composite substance is itself composite. It appears to identify the substantial form with the specific nature or

essence, and regards the complexity of the essence as a composition of diverse formalities,—a generic or determinable factor and a differential or determinative factor,—which, though both are aspects of one form, it regards as united in a manner *analogous* to the composition of prime matter and substantial form. But St. Thomas says plainly that the form of a composite substance cannot be called its essence, for the esssence, like the substance, embraces both matter and form,—the matter being common or universal, not signate or individual (*De Ente et Essentia,* Ch. II; *Summa Theologica,* I, 75, 4; 76, 1; 85, 1, ad 2). The common matter is the generic component in the specific nature, and the substantial form is the difference. If the first position claims that the denial of hierarchy results from a violation of the antecedent principle that substances are not related as contraries within a genus, it can be equally well said that the first position's affirmation of hierarchy turns upon a misconception of the composition of essence. The second of the antecedent principles,—that the species of a composite substance is its substantial form (Part II, Section 7, *supra*),—is false as thus stated; for although it is true that the substantial form determines the specific nature, because it is the principle of the specific difference, it is not true that specific nature, or essence, is one with the substantial form.

Since the principle of hierarchy here questioned is not self-evident, it must be subject to proof or disproof; and any attempt to prove it must avoid appealing to false principles or to dubious interpretations of true ones, as above noted. If it cannot be proved, then it is merely an *assumption*, whereupon all the arguments, which employ it to show that there is only a small number of species, are dialectical rather than demonstrative. And, moreover, so are all the arguments which the first position has formulated against the second position, in so far as they depend on this assumption about hierarchy. Hence, if no proof is forthcoming, several objections are rendered ineffective, in whole or part (Obj. 1, 4, 5, 6 contra II).

Reply Obj. 1. The principle of hierarchy, as that is set forth in the objection, can be demonstrated in several ways. We shall attempt to prove the *absolute* inequality of essences, or specific natures. By absolute inequality is meant that the substances being considered are not equal in respect to any part of their essences, that each is higher or lower than every other in grade of being. But if two species were to share equally in a common generic nature, even though ordered as higher and lower by

their differences within that genus, they would not be absolutely unequal in an essential respect. Hence, to prove the principle of hierarchy we must establish the proposition that species of composite substance never participate in a common generic nature. The theory of hierarchy is a theory of the order and constitution of species. Upon the way in which they are constituted depends the way in which they are ordered. Here, then, we shall attempt to prove how natural species *must* be constituted, and from this will follow how species *must* be ordered, namely, in a perfect, unilinear hierarchy of grades of being.

But, first, it is necessary to comment on the point, made in the objection, that the argument is affected by the view which is taken of the composition of essence, in the case of composite substances. There appear to be two positions on this question: (1) that the essence is composite of common matter and substantial form, and that the common matter, as constituting the generic nature, and the substantial form, as constituting the differential nature, together constitute the specific nature; (2) that the essence or specific nature is identical with the substantial form, and that the form or essence is composite of two analytically distinguished factors, a generic and a differential principle, which are not respectively matter and form, although they are related as matter and form are, namely, as the determinable and the determinative.

The two theories oppose each other in a strictly metaphysical issue, antecedent to problems in the philosophy of nature. Although St. Thomas has been cited as favoring the first of these two positions by explicit statement on the point, there are other texts in the writings of St. Thomas which *appear* to speak in a contrary vein and, what is more important, there are reasons for thinking that the concept of a common matter, as part of the essence in union with substantial form, is inconsistent with what is, perhaps, the most fundamental principle in St. Thomas's hylomorphism, namely, the unicity of substantial form. Moreover, there are clearly contrary passages in the *Metaphysics* of Aristotle, in some of which he appears to identify essence and substantial form (e. g., V, 4; VII, 10, 11, 17; VIII, 3; IX, 7), and in others of which he seems to admit the notion of common matter as entering into the essence (e. g., VI, 1; VII, 8, 10, 11, 12; VIII, 6; X, 8, 9). Now, if the settlement of this issue made a difference to the problem about species, it would be impossible to proceed without a prior resolution of the metaphysical question. *But that is not the case.* In other words, the objection is right in calling attention to the metaphysical ques-

tion, but wrong in supposing that it must be answered before we can solve the problem of species, or in supposing that one answer rather than the other will result in a different solution of the latter problem.[173]

In order to substantiate what has just been said, we shall first demonstrate the principle of hierarchy in terms of the theory that a union of common matter and substantial form constitutes the essence or specific nature; and then in terms of the theory that the essence or specific nature is the substantial form. Although the problem of species is primarily one in the philosophy of nature, the demonstration of hierarchy is primarily metaphysical, since it is concerned with the constitution and inequality of essences. Nevertheless, it will be seen, from the alternative demonstrations of hierarchy aforementioned, that the issue about common matter, however important it may be in other metaphysical connections, makes no difference to the present problem. What does make a difference is the larger context of propositions which constitute the whole doctrine of hylomorphism; and, it might be added, the choice between the two theories of essence will also be dictated by a judgment of which comports better with a sound hylomorphism. The failure to see that the conception of hierarchy is required by this doctrine is due to neglect of several of its most crucial points. To repeat, the proof of hierarchy does not depend on the antecedent principle in the form which has been questioned, since the alternative formulation of it, which the objection regards as true, serves our purpose as well.[174]

[173] The metaphysical issue concerning the composition of the essence of composite substances will be discussed in the second article in this series. It is a problem for Thomists, first, because in the writings of Aristotle and St. Thomas, there are contrary relevant texts; and second, because there are principles in the philosophy of Aristotle and St. Thomas, some of which favor one solution of the issue, and some the other. Though the solution of the metaphysical problem does not affect the present issue concerning species in a decisive way, it nevertheless will throw light on the significance of any solutions we reach with respect to that issue; and, moreover, it may help us to formulate, in a more precise fashion, other problems in the philosophy of nature,—such as one about generation or substantial change, and one about the nature and specification of physical accidents.

[174] The reader may ask why one of the antecedent principles was thus stated in a questionable form. He may also have noted that at various places in preceding parts of this article, there has been a certain ambiguity about the composition of material essence and about the relation of the substantial form to the essence, as identical therewith or as a component principle thereof. I may have appeared to beg the question by favoring one solution of the metaphysical problem about essence rather than another. My justification is that the metaphysical question cannot be solved in this article and that the most appropriate place, therefore, at

The first proof is as follows. Two substances are said to be the same in genus if their common matter is the same, and different generically if they do not share the same common matter. As diversity in (substantial) form determines diversity in species, so diversity in (common) matter makes diversity in genus (Aristotle, *Meta.* X, 3; St. Thomas, *In de Trin. Boetii,* IV, 2). It should be noted at once that the word " common " in the phrase " common matter " does not mean " common to two species," for according to the foregoing statements, two substances differ in genus if their common matters are diverse. Matter is said to be common in the sense of being universal as opposed to individual or signate.

Now it can be shown that two substances which differ in species cannot be the same in genus, that is, cannot participate in the same common matter. For common matter is either totally indeterminate, or has some determination. If it is totally indeterminate,—as prime matter is by the remotion of all forms,—then it will be the same in all essences which are composed of common matter and substantial form, just as it is the same prime matter which enters into the composition of all corporeal substances. If that is the case, then there can be no generic differences among such substances, either proximate or remote. But, in denying hierarchy, the objection does not maintain that all species are the same in genus; rather it holds that two species can share the same proximate genus, while at the same time differing from other species generically. And this is impossible if common matter, which determines generic sameness and difference, is totally indeterminate. If, on the other alternative, common matter is determinate, so that diversity in common matter results from the diversity of its determinations, then we must look to form as the principle of such determinations. A determinate common matter is determined by the substantial form with which it is united in the composition of the essence. But the forms which enter into essences belonging to distinct species must be diverse, since the form is the principle of the specific difference. Diverse forms cannot determine matter in the same way. Since a diversity in common matter as determinate follows upon a diversity in the determining forms, it follows that substances differing in species cannot participate in a common genus; or, in other words, distinct essences cannot have the same common matter any

which to acknowledge the opposed answers to the question is here where their relevance to the issue concerning species has been alleged and denied. Beyond that, I must admit that the reader has rightly detected my leaning toward one side of the metaphysical issue; but that is a matter to be examined more fully in another article.

more than they can have the same substantial form. Furthermore, since two things can be equal in being only in some respect in which they are the same, it follows that in no case are two essences, composite of diverse matters and diverse forms, equal in being. This it was which had to be proved in order to establish the principle of hierarchy, namely, that the various essences, or specific natures, of composite substances are absolutely unequal *inter se,* a conclusion which has been shown to follow from the fact that two essences cannot be the same in their common matter any more than they can be the same in their substantial form.[174a]

This conclusion appears to conform to the opinion of Aristotle in *Metaphysics,* X, 8, where he says that " difference in a genus is an otherness which makes the genus itself other." And he states, as an example, that although both horse and man are animals, " this very animality must be different for each." In other words, Aristotle is here distinguishing between the genus which can be common to two species as a *logical* predicate, and the generic nature which is *ontologically* never the same in the constitution of two species. But Aristotle, in this place and elsewhere, also says that otherness in species is a kind of contrariety,—not the kind which obtains among accidental forms, but the primary sort of contrariety between form and privation (*Meta.,* X, 4),—and contrariety must occur within one and the same genus. Hence, there must be some truth in the opinion that all physical substances are

[174a] The central principle of the foregoing argument is stated, in a different context, by St. Thomas. In discussing the species of angels, he considers two possibilities: either the angels are simply forms, in which case diversity of species and inequality of natures follow directly from differences in form; or the angels are composed of matter and form, with respect to which false supposition, St. Thomas argues thus: " The same would follow if the aforesaid substances were composed of matter and form. For if the matter of one be distinct from the matter of another, it follows that either the form is the principle of the distinction of the matter—that is to say, that the matter is distinct on account of its relation to divers forms; and even then there would result a difference of species and inequality of nature; or else the matter is the principle of the distinction of forms. But one matter cannot be distinct from another, except by distinction of quantity, which has no place in these incorporeal substances " (*Summa Theologica,* I, 75, 7). The principle of this argument holds for corporeal essences, of which can it be said that they are either simply forms or that they are composed of (common) matter and (substantial) form. For, in the first case, their inequality follows directly from the differences of form; and, in the second case, it can be argued, as in the text above, that the distinction of the matters is on account of relation to divers forms, and inequality of nature will again follow from diversity of forms. Since the matter supposed to enter into the composition of physical essences *is not signate,* distinctions of quantity cannot be attributed to it any more than to the sort of matter which some have supposed to enter into the composition of angels.

the same in genus, for they are other in species,—in fact, ordered in a hierarchy by the primary contrariety which results from each species possessing a formal perfection lacked by every inferior species and possessed *eminenter* by every superior species. All corporeal substances are the same in genus in so far as their matter, prime or common, is the same by the remotion of all forms. This was the truth indicated above according to the first alternative in which we regarded common matter as totally indeterminate, for in that view common matter must be the same in every essence, and all composite substances must be the same in genus.

In what sense, then, can matter be the principle of generic difference? Aristotle's answer is in terms of the generic difference between celestial and sub-lunary bodies. This difference is caused by a difference in matter, which is in one case the principle of incorruptibility, in the other of corruptibility, in the composite. The scientific error here need not concern us, since our only interest is to understand how Aristotle could consistently hold three things: 1) that the proximate genus which enters into the composition of a specific nature is never the same for two species, 2) that the specific diversity of sub-lunary substances is constituted by otherness within a single genus, namely, the *sub-lunary*, which 3) is distinct from another genus of substances, the *celestial*, by reason of a diversity in matter. St. Thomas confirms our interpretation when he points out (*In de Trin. Boetii*, IV, 2) that there are three large genera of created things, some with matter, some without matter, and some with a matter altogether diverse. By the third is obviously intended the celestial bodies. If these be excluded from consideration, because we now know that they are corruptible and alterable, as well as capable of local motion, there remain only spiritual and corporeal substances, between which there is a generic difference caused by matter, in the sense that the one is with matter and the other without it. But to say that all corporeal substances are the same in genus, because they are all composite of matter and form, is to say that *corporeal* names a genus of created substance. Within that genus, however, all diversity, whether in generic or specific natures, is caused by form, as we have shown; from which result the conclusions that two species never participate *ontologically* in a proximate common genus, and that the species of corporeal substances are absolutely unequal *inter se*. These two conclusions are the distinctive notes in the theory of hierarchy, and so we have now shown, not only the truth of that theory, but its consistency with the other truth that there are some generic differences among

created substances, at least the one between spiritual and corporeal things, *in relation to which many species can be the same in grade of being*, for all corporeal substances are generically the *same* as corporeal and, *as corporeal*, they are all *equally* inferior in grade of being to the angels. In other words, the inequality of essences, which has been proved, is within a realm of being: not only are all composite substances *as corporeal* equally inferior to the angels, but all creatures as creatures are equal in their infinite remotion from Uncreated Being.

The first proof was made in terms of the metaphysical theory of the essence of a composite substance as composite of common matter and substantial form. The second proof, to which we now turn, will be made in terms of an opposing metaphysical theory, namely, that the essences of composite substances are the same as their substantial forms. On this view, the essence is composite in the sense that it is constituted by two formally distinct aspects, a generic, or determinately determinable aspect, and a differential, or determinately determining aspect. Because the one is determinable and the other is determining, these two factors in the essence are related to one another as matter and form. The material aspect of the form is what we call the generic nature; the formal aspect of the form is what we call the differential nature. This is not to say that a form is composed of matter and form, for that would be manifestly false, but rather that the essence of anything which *is* a species or *in* a species must be complexly constituted by two principles,—a generic and a differential factor. To speak of these two principles as *material* and *formal* is to *analogize* them with, but not to *identify* them with, matter and form. Just as a substantial unity results from the union of what is really matter and form, so an essential, as opposed to an accidental, unity results from whatever is *related as* matter and form. The analogy applies to the generic factor, which is determinable in a way that is determinate with respect to definite determination, and to the differential factor which is determining in a determinate way. The essential unity of the genus and difference, though they are distinct formalities, constitutes the species as a nature determinately determined. This seems to be the opinion of Aristotle whenever he speaks of genus and difference, not as matter and form, but as co-principles of the essence, united as matter and form are united in the composite substance (*Meta.*, V, 28; VIII, 3, 6). The logical intentions of genus and difference are, of course, taken from what is ontologically generic and differential in the specific nature; and so whereas, according to one theory, it is said that the logical intentions, genus and differ-

ence, are taken from the *common matter* and the *substantial form* respectively; it is said, according to the other, that these intentions are taken from what is *material* and what is *formal* in the essence or specific nature. In the latter case, it must be remembered that the material, as well as the formal, note is an aspect of the substantial form; neither is a form; both are formalities, and distinct only as formalities. (It might be added here that as logical intentions genus and difference are quite separate terms, but as ontological formalities they are only analytically distinct aspects of the same form.)

Now if the generic formality is related to the difference as matter is to form, the argument which was stated before, according to the theory of essence as composite of common matter and substantial form, can be restated here. For the generic nature as a formality cannot be indeterminately determinable; and if it is determinately determinable, such determination must be due to a determining principle, the formality of the difference. Hence in two substances of distinct species, the diversity of their positive differences must be accompanied by a diversity in their generic natures. Since the generic factor as determinately determinable is determined in its determinability by the difference as the determining factor, one and the same generic formality cannot enter into the composition of two essences by union with distinct positive differences. Now while it is true that as between two proximate species there is only one difference, possessed by one and lacked by the other, nevertheless, each species regarded in itself is constituted by a positive difference, distinct from the positive difference which constitutes any other species. (This is apparent whenever a given species is compared with its inferior; when compared with its superior, it is marked, not by a positive difference, but by its privation. Vd. fn. 140b *supra*.) Hence it follows that the generic formality, with which any given distinct positive difference is united, must also be uniquely the proximate genus of that one species, since genus is uniquely determined by the given difference. But this entails what was to be proved, namely, that two specific natures never participate in the same proximate genus, and that, being dissimilar both as to genus and difference, two essences or substantial forms make the substances, whose specific natures they constitute, unequal in grade of being.

The foregoing argument conforms to the reasoning of St. Thomas in *De Ente et Essentia,* Ch. II, where he explains how the genus signifies the same whole, or essential unity, which also the difference signifies, though the former signifies it as further determinable, and

the latter as determining that determinability. Hence, if both signify the same essence, though in different aspects, i. e., materially and formally, diverse differences cannot be united with the same genus, for then one essence would be both same and different in respects which are not independent of each other. To avoid this impossible consequence, one would have to say that the generic formality is independently determinate, but that is also impossible for two reasons: first, because the generic factor is like matter, which is either totally indeterminate or must receive its determinateness, even with respect to determinability, from another factor which is like form, namely, the difference; and second, because genus and difference are co-principles in the substantial form whose complex unity they comprise; therefore, just as two individual substances cannot have the same signate matter or the same individuated form, so two substantial forms or essences cannot have the same material or the same formal principle (i. e., the same generic and differential formalities). If St. Thomas appears to say that many species can have the same genus, that must be understood in the same way that Aristotle is understood to place all corporeal things in the same genus because of the sameness of their matter. As prime matter is one by the remotion of all forms, so there is a generic grade of being which can be called one for all physical species.

The foregoing argument can be supported, furthermore, by a consideration of the hierarchy of angels. Angels are species, and hence their essences are complex, as involving both genera and differences. Those who hold that the essence of a corporeal composite is itself composite of matter and form regard the essence of a spiritual substance, which is without matter, as simple; nevertheless, even as a form capable of existing apart from matter, the angelic essence is complex in so far as being a specific nature it must involve genus and difference. In one sense, then, a form which is an essence or specific nature has the same complexity in the case of corporeal and spiritual substances; but, looked at another way, the complexity is not the same because the generic formality in the essence of a corporeal substance is as a material principle, whereas the generic formality in the essence of an intellectual substance is as an intellectual principle; and intellectual potency is the analogue of the potentiality of matter. This much we can say of spiritual natures, though our knowledge of their speciation,—of how genus and difference are united in them,—is at best negative and analogical (*De Ente et Essentia*, Ch. V). Nevertheless, according to St. Thomas, we know that each angel is a distinct species (*Summa Theologica*, I, 50, 4), and that "no two separate sub-

stances are equal in degree of being, but that one is naturally above or below another" (*Summa Contra Gentiles,* II, 95). Although the word "hierarchy" is used in a different sense when it is said there are three hierarchies of angels, in each of which there are three orders (*Summa Theologica,* I, 108, 1, 2, 3), it is clear that from the lowest angel, or least perfect spiritual nature, to the highest seraph, or most perfect, each separate substance is a species higher or lower than another. Thus the angelic society is a perfect, unilinear hierarchy, which is divided into subordinate "hierarchies" and "orders" *only in relation to the Divine Government.*

Despite the generic difference between corporeal and spiritual creatures, due to the materiality of the one and the immateriality of the other, the absolute inequality of essences obtains in both realms, because a specific nature is complexly constituted by genus and difference. With regard to the absolute inequality of species, it is indifferent that in one realm the generic factor reflects the materiality of the substance, and in the other its intellectuality; or that in one case the specific nature is subject to individuation, and not in the other. If no two angels are equal in perfection of being, neither are any two physical species, and for the same reasons. This is especially true if the essence of a composite substance is the same as its substantial form,—in which case the difference between the angelic and the physical essence would not be the inclusion of matter in the latter, but rather the former's capacity for existence without individuation. But it remains true even if the essence of a corporeal substance is not the substantial form, but a union of that form with common matter, for just as two angels do not have the same capacity for knowledge, so the common matters of two physical species are diverse potentialities for material perfection.[174b]

There is still another proof of the principle of hierarchy. The preceding proofs are really the same in their manner of reasoning, even though they are differently formulated according to different metaphysical theories about the composition or complexity of the essence,—a difference which we now see to be irrelevant to the issue. But this proof differs, having its origin in the proposition that

[174b] In the case of intellectual substances, St. Thomas observes, division into species is not accomplished by two true differences (*De Ente et Essentia,* Ch. V); or, in other words, between two such species, proximately related as superior and inferior, there is only difference, possessed by the superior and lacked by the inferior. Now the same situation must prevail in the case of corporeal substances, if their species are ordered according to the paradigm of the angelic hierarchy, and for the same fundamental reasons. This is precisely what the first position contends, namely, that in a hierarchy of species there is only one difference *between* species related proximately as superior and inferior. Vd. fn. 140b *supra.*

every substantial form confers upon matter not only a perfection peculiar to itself, but the perfections which every inferior substantial form is able to confer. It is for this reason that St. Thomas says that a superior form " virtually contains all inferior forms, and itself alone does whatever the imperfect forms do in other things " (*Summa Theologica,* I, 76, 4); and the superior form adheres to matter immediately, i. e., without the mediation of inferior forms (*ibid.,* ad 3). This proposition states the truth about the unicity of substantial form against the errors of pluralism. One example explains its meaning: because the human soul virtually contains the animal and vegetable souls, human nature includes all the perfections which animals and vegetables possess; and since human nature is superior to these other natures because of an additional perfection, rationality, it is not only *formally* sensitive and vegetative, but *eminently* so.

The proof proceeds in an indirect manner by a *reductio ad absurdum.* We begin with a true dilemma: *either* each substantial form is superior or inferior to every other substantial form, *or* that is not the case, and two substantial forms are coordinate as perfections of matter. Let us choose the second alternative, and see what its consequences are. The second alternative does not affirm that *all* substantial forms are coordinate in the grade of perfection they confer on matter, but only that *some* are. Now, let M and N represent any two coordinate substantial forms, and let A represent any substantial form superior to them both. But M and N, by hypothesis, are essentially different, for they are either diverse specific natures or the principles of specific diversity. Hence, they must be incompatible with each other in the sense that both could not co-exist in the same substance, either actually or virtually. For if two coordinate species of an accidental genus, through contrariety, cannot be simultaneously present in the same subject in the same respect, how much more so must this be true of two coordinate species of a substantial genus, since their *otherness* would be more profound. But the principle that a superior substantial form confers upon matter the perfections conferred by *all* inferior forms, because it includes all of them virtually, is a truth without exception. It follows, therefore, that the substantial form A must include both M and N,—*virtually,* of course, not *actually.* This, however, is impossible. If M and N are coordinate, they are contrary according to the type of contrariety which obtains among accidental forms, not according to the primary type of contrariety which John of St. Thomas calls incompossibility (*Phil. Nat.* Pt. I, Q. 2, A. 2). Hence,

if M and N are coordinate forms, they cannot be co-present in one substance, either virtually or actually. Hence, *either* the principle concerning the virtual presence of all inferior forms in any superior nature is false, *or* it is false that there can be two coordinate forms. But the first cannot be false without violating the meaning of superiority and inferiority in grades of being, for then a superior would lack something of the perfection which an inferior form confers. Therefore, the second must be false.

Thus we are thrown back on the first horn of our original dilemma, namely, that each substantial form is superior or inferior to every other. This must be true, if the other alternative is false. It remains only to show that this truth entails the principle of hierarchy, which is to be proved. That can be done as follows: If the substantial form is the essence or specific nature of a corporeal substance, the conclusion is reached at once, because the absolute inequality of substantial forms means an absolute inequality of species. If, on the contrary metaphysical theory, the substantial form is not the essence, but only the principle of the difference, the same conclusion can be reached. Since two forms, as substantial differences, must necessarily be diverse, and since coordination or equality must be in a respect in which two things are the same, it follows that they can be coordinate or equal only as determinations of the same generic matter. But we have shown that no two substantial forms can be coordinate. Therefore, the common matters of two species, which constitute their genera, are no more the same than their substantial forms, which constitute their differences. The denial that two species participate in the same generic nature is tantamount to the affirmation of the principle of hierarchy, i. e., the absolute inequality of species.

To clarify the significance of this proof, two further points must be made. 1) It may be thought that the incompossibility of substantial forms precludes the virtual inclusion of one by another. That would be a misinterpretation of such incompossibility, which is not the contrariety of accidental forms, but due to the contrariety of form and privation. Two substantial forms cannot, of course, be actually present in the same substance, but because they are related as more and less perfect, the inferior is always virtually present whenever the superior is actually there. The same thing applies in the case of two forms inferior to a third: both can be virtually present in the substance which the third form, superior to them both, actually constitutes, *only* if one is more perfect than the other, so that if the former were actually present in a substance,

the latter would be virtually there. Hence, there is no difficulty about saying that a given substantial form includes a whole series of inferior forms as virtually present in the same substance, so long as each member of this series is more or less perfect than another, i. e., so long as they are related as inclusive and included rather than as coordinate.

2) In any case, the proximately inferior form is analytically discerned as the generic formality in the constitution of the essence. In other words,—treating the substantial form as identical with the essence,—the generic aspects of the nature are determined by the substantial form in so far as it includes inferior forms virtually, and the differential aspect is determined by the substantial form in so far as it exceeds all inferior forms by possessing a perfection of which they are all deprived. This removes any difficulty about understanding the complexity of a substantial form, for the distinct formalities of genus and difference which compose it can now be seen as the virtually included inferior form and the perfection by which it is further determined. Since what is virtually included is virtually distinct, and since what is virtually distinct can exist actually in its own right as an inferior nature, the virtual form which constitutes the generic nature of one substance can be the actual form and specific nature of another and inferior substance. Thus, the animal soul as a virtual form in man constitutes his generic nature, and as the actual form in brutes constitutes their specific nature. If, however, the substantial form is treated as a component of the essence, then the inferior forms which it virtually includes must be thought of as determining the common matter, from which the genus is taken; in which case we see the reason for a point previously made, namely, that the determinate determinability of the common matter is *not independent* of the substantial form.

Finally, the fact that the second position violates the third antecedent principle,—that substantial species are not related as contraries in a common genus,—is now seen to be crucial. The truth of this principle is involved in the truth concerning hierarchy. The kind of contrariety which obtains among accidental forms is strictly incompatible with a hierarchical ordering of species, arising from their absolute inequality. The two truths are related in such manner that if one be granted, the other follows; or if one can be proved, the other is established. We have chosen to prove the principle of hierarchy.

It should be noted that the number of species has not been

proved. The principle of hierarchy is compatible with *any* number of species, a hundred or a thousand as well as five. Nevertheless, the demonstration of hierarchy has several effects which bear on the number of species. In the first place, it requires us to reject most of the evidence whereby the second position thinks it has accomplished a large number of specifications. The empirical signs (i. e., the various contingent accidents) it has employed cannot be used to determine species, wherever they do not enable us to place these so-called species in a hierarchy. This, of course, depends on the rule that specifying signs must be themselves ordered as the essences they help us indirectly to apprehend. The rule is as valid for contingent accidents, as specifying signs, as for properties. Since the second position does not reject this rule, it is bound to acknowledge that wherever it has failed to *hierarchize* it has also failed to *specify*. It cannot, in other words, explain away its failure by any epistemic evasion; it cannot say that its " inadequate specifications " are due to the fact that our knowledge of these specific natures is inadequate, is not quidditative. The truth of hierarchy imposes objective criteria on what knowledge can be used, and how it must be used, to determine species. Just as in the case of angels and *artificiata*, an ontological analysis tells us about the existence or non-existence of species, so that we know there is a very large number in the former case and none in the latter, despite, our woefully inadequate and our relatively adequate knowledge of forms in the two cases respectively; so here, the ontological demonstration of hierarchy sets up objective conditions for determining the number of natural species, which is prior to, and regulative of, the use we make of any knowledge we possess, of whatever degree of adequacy.

In the second place, the various objections against the second position, which were answered by questioning the concept of hierarchy on which they rested, are now sustained against such answers. This applies especially to Obj. 4 and 5 (*contra* II) which maintained that the second position violated the radical distinction between the ordering of substances and of accidents, according to genera and species; and that the second position violated the radical distinction between ontological and logical hierarchies. It also applies to Obj. 6 (*contra* II) which claimed that the second position is forced to use the word " species " equivocally, for that equivocation is due to the fact that the second position attempts to combine a logical with an ontological ordering of species. To a lesser extent, it even applies to Obj. 2 and 3 (*contra* II), as will become apparent subsequently (in the reply to Obj. 2 *contra* I).

OBJECTION 2. As already said (in Reply Obj. 2 *contra* II), it has not been shown that there are only three souls, or some similarly definite, small number. Yet upon such a showing depends I's contention that such kinds as *spider* and *tiger, eagle* and *shark, earth-worm* and *cow,* or *rose-bush* and *oak-tree, fungus* and *fern,* are not diverse species within the genera of *animal* and *plant.* That there are only three souls is certainly not self-evident, nor does it even follow directly from the principle of hierarchy. Appeal to authority will not suffice, because the various texts which have been cited on the point are ambiguous: they can be read as meaning three genera of souls, not three species. The interpretation made by the first position is *ad hoc,* merely to confirm its notion about hierarchy. Furthermore, whatever arguments have been advanced to show that there are only three souls have referred only to the generic vital powers; but there are many more than these, since in several instances the generic power subsumes a large number of specific ones. And even in the case of the specific powers, there are further distinctions according to the mode of operation of the power by reason of the organic structures in which it is embodied. We admit that the number of substantial forms and species, in the sphere of living things, is the same as the number of souls (with respect to *kind*); but unless the number of souls is proved, nothing follows from that admission concerning the plurality of living species.

REPLY OBJ. 2. That there is a definite, small number of kinds of soul can be proved. What that number is cannot be said with the same certainty as that the number is small, definitely less than ten. There are good reasons for saying that the number is not only less than ten, but that it is definitely three. Nevertheless, because these reasons lack absolute conclusiveness, we shall divide our answer to this objection into two parts: a first, in which it is proved that the number of distinct souls (diverse substantial forms of living things) is less than ten; and a second, in which it is argued that the number is three. It should be noted, at once, that the first part of this answer is sufficient to refute the second position, in so far as it asserts a larger plurality of living species than this. If, however, it accepts a number less than 10, there is no disagreement; but then it must be admitted that many, if not most, of the kinds which the second position has called "species" are obviously not. It should be observed also that the arguments to be presented are not absolutely independent of the principle of hierarchy already established (in Reply Obj. 1 *contra* I); but these arguments while depending on that principle in so

far as the order of souls as superior and inferior is concerned, goes beyond it in determining the number of souls, either definitely (three) or as a limit (ten).

The proof that ten is the limiting number can be accomplished in the following steps. 1) Soul is related to operative power as substantial form, or essence, is related to property, or proper accident. Essence and power are distinct, but powers flow from the essence, and in this sense it is said that the soul of a living thing is the proximate principle of all its vital powers. Since only the powers are determined to exist by the soul alone, as flowing from the essence, whereas the existence of habits and operations are determined by powers in relation to objects, the latter cannot be called properties, in a strict sense. Operations and the operative habits they cause are contingent accidents of a living substance; how much more so, then, are all other accidents contingent, as depending on the signate matter or extrinsic conditions. In short, the only properties of a living substance are its powers, for nothing else depends for its existence in the subject on the soul alone. This concurs with the opinion of St. Thomas (*Summa Theologica*, I, 77, 1, ad 5; 77, 6); and he says, further, that " the species of a thing is gathered from its operation since operation indicates the power which reveals the essence " (*Summa Contra Gentiles*, II, 94).

2) We shall be concerned here only with the vital powers, for we are considering the specification of substances as living, and the material potentialities (i. e. the passible potencies) of all living things must be the same. Now, it is admitted that the powers of the soul can be distinguished as generic and specific; thus, for example, the sensitive power is generic and can be divided into a number of specific powers of exterior and interior sensitivity. Since powers are accidents, several specific powers can participate in a common genus; but, so far as existence is concerned, only the specific powers exist as such. Now, by " specific powers " we mean, of course, infima specific powers, for the division of powers according to genera and species cannot go on indefinitely, and any power which is not infima specific is generic, and does not exist as such.

3) So far as our knowledge of them is concerned, powers are specified by their operations which, in turn, are essentially distinguished by relation to essentially diverse formal objects. As St. Thomas says, " we know the nature of a power from the act to which it is directed, and consequently the nature of a power is diversified, as the nature of the act is diversified. Now the nature of an act is diversified according to the various natures of the

objects. Not any variety of objects diversifies the powers of the soul, but a difference in that to which the power of its very nature is directed" (*Summa Theologica,* I, 77, 3). Whence it follows that powers are distinguished generically according to generically formal distinctions among their objects; specifically according to specifically formal distinctions; and those are infima specific powers which are directed toward objects whose diversity is constituted by the *last* formal difference. Within the sphere of a single specific power, any further differentiations must be accidental; for if there were formal differences in the object more determinate than the one which distinguished the power, it would follow that the power must be generic, and that these more determinate objective formalities would occasion a further distinction of species. Hence two things must be added: first, that the distinction of habits within a single power must be determined by objective formalities of such a character that they fail to specify powers, for otherwise every habit would be a power, whereas with regard to the power which is their common subject, habits are only accidentally different; second, that differences in the mode of operation of a power, which are due to the structure of organic parts or the combination of such parts, are also accidental, since they are based on the material rather than formal or final cause of operation. Finally, it should be noted that the foregoing discussion considers the way in which we come to know and specify powers, and not how they exist: the soul alone is the principle of their existence and diversity, although differences in object and operation, and even in some cases differences in organic embodiment, are the terms whereby we are able to know of their existence and their diversity.

4) According to St. Thomas, we are able to enumerate all the generic and specific powers of living things, for two reasons: first, because man has sufficient understanding of his own nature to know all his powers in their specific distinction; and second, because the human soul, as the supreme form of life among composite substances, virtually includes all inferior forms, and by the virtual presence of the vegetative and sensitive souls, man is endowed with *all* the powers which can be found among living things (*Summa Theologica,* I, 76, 4). This argument depends upon a strict application of the principle of hierarchy, as previously demonstrated (Reply Obj. 1 *contra* I), in the light whereof it is clear that no living thing possesses a generic or specific power which is not possessed by man, *eminenter.* The principle of hierarchy does not, of course, apply to habits or accidentally distinct modes of opera-

tion, whence it is entirely possible that certain natural habits (usually called "instincts") may be found in some animals and not in others, or that a certain mode of reproductive operation may be found in some plants and not others, or that different modes of locomotive operation may be found among animals capable of progressive motion, and so forth. The observed facts are here corroborative.

5) Let us name and number all the specific powers of man: in the vegetative genus, there are three species, the nutritive, the augmentative, and the reproductive; in the sensitive genus, there are nine species, five exterior senses and four interior; in the appetitive genus, there are two species, the sensitive and intellective; in the locomotive "genus," there are no species, the locomotive power being itself infima specific; in the intellective genus, there are two species, the possible and the active intellect. The total number is 17. There is only one area of uncertainty in this enumeration, and that is with respect to the generic power of sense, for some claim five interior senses, and some might argue, from modern researches, that there are eight exterior senses, dividing the tactual sense further into species. For our purposes, however, this uncertainty is no impediment, because it will make little difference to the point at issue whether the total number is 17 or 21.

6) Now one further fact must be added, namely, that the various powers are ordered to one another according as they are independent or dependent and correlative. Thus, the three vegetative powers are always concomitant; appetite is never present without sense or intellect, and wherever there is one or both cognitive powers, one or both species of appetite is found; the locomotive power is never present without sense and appetite, although sense and appetite may occur in its absence; among the sensitive powers, certain senses, such as touch, taste and smell may be present without sight and hearing, or without the powers of interior sensitivity; and finally, the two intellective powers are always concomitant. If we summate the powers according to their independence of one another, we find the following: the three vegetative powers count as one; the cognitive and appetitive powers count as one, although the sensitive power's independence of intellect makes this complex correlation count as two; the locomotive power counts as one; and the sensitive power, in terms of the independence of its several species, counts either as four or five, according as one takes different views of the correlation of the various interior and exterior senses. The largest total here is nine, that is, nine sets of powers, ordered

as higher and lower, or dependent and independent. This ordering of the powers agrees with the opinion of St. Thomas (*Summa Theologica,* I, 77, 4, 7).

7) Thus we are led to the conclusion, namely, that there cannot be more than ten species of animate substance, for there cannot be more than ten souls if the number of independent sets of powers is ten or less. In thus fixing the number at ten, we are allowing for a larger margin of error than is likely, in view of the facts about the distribution of vital powers among plants and animals. The reasoning here is plain. If the soul is the principle of vital powers, essential distinctions among souls must be correlative with the division of powers into independent sets; the number of souls cannot be more than the number of such sets, although, as we shall see, it may be less. According to the hierarchical ordering of forms, each soul must be superior or inferior to another, and the superior in each case, because virtually including all inferiors, will be the principle of all the powers which the inferior forms confer, as well as additional powers which flow from the substantial difference which marks its own superiority. The number of such steps of gradation, due to the addition of higher powers, cannot be greater than the number of independent sets of powers. The conclusion we have reached is thus seen to follow from four things: the principle of hierarchy, the relation of souls to powers, the total number of powers, and the order of these powers according to higher and lower, dependence and independence.

This proof calls for a number of comments. In the first place, it shows conclusively that there cannot be more than one species of plant. *Plant* is an infima species, because there is only one vegetative nature or soul, as indicated by the fact that there are only three vegetative powers, which are always simultaneous. In the second place, only two sorts of distinctions are possible in the sphere of infra-human, animal life: one, with respect to the power of locomotion, which certain animals possess and others do not; the other, with respect to the possession or lack of certain specific powers of interior and exterior sensitivity. In view of these two facts, there may be several distinct sensitive souls, and hence several species of *brute*: a species of imperfect animal, lacking locomotion, and a species of perfect animal, having locomotive power. There are texts which *appear* to take this view; thus, St. Thomas says "one species has an additional grade of perfection over another, for instance, animals endowed with locomotion over those that are immovable" (*Summa Contra Gentiles,* II, 95; cf.

John of St. Thomas, *op. cit.*, Pt. IV, 1, 4). Animals may be further specified according as they possess or lack this or that specific sensitive power; thus, St. Thomas says that "irrational animals differ in species according to various determined degrees of sensitive nature" (*Summa Theologica,* I, 50, 4, ad 1; cf. Gredt, *loc. cit.*). But since animals with the higher sensitive faculties (the distance senses) also possess the power of locomotion, the number of animal species is either six or less, and the total number of living species, including *plant* and *man,* is probably less than nine.

In the third place, this number cannot be increased by reference to any other accidents as grounds for further specifications, because such accidents, whether they be habits or accidental modes of operation, due to organic differences, or extrinsic accidents, such as figure, color, etc., are not properties; and hence, they can possess significance for specification only if they signify properties directly and essences indirectly. But because of the fact that we know all of the properties (powers) of living things through the knowledge we have of human nature, these other contingent accidents cannot possibly help us to discover powers with which we are now unacquainted. Therefore, they can have no specifying significance. This argument against the way in which the second position proceeds to make specific determinations in the light of contingent accidents is quite independent of the argument based on the principle of hierarchy (vd. Reply Obj. 1 *contra* I). This one applies, of course, only in the sphere of living things. If it be further objected against this argument, that we do not know all the powers of man in their ultimate specificity, the only answers which can here be made is that then we must be ignorant of the criteria by which powers are specified; or that we have made errors in the application of such criteria to the observed facts. Suffice it to say that traditionally neither of these answers is admitted.[175] In the fourth place, the proof that there are ten or fewer species of animate substance has a bearing on the number of species of non-living things which, according to a well enunciated principle, must be even fewer (vd. Part IV, Section 15, *supra*). But, whether in its ancient form which distinguishes four elements and a larger number of mixtures, or its modern form which says there may be ninety-two elements, etc., the second position appears to affirm a number of non-living species, which is untenable in consequence of this proof.

[175] The tradition on these matters will be examined in the fourth article of this series, dealing with the problem of the specification of accidents, and chiefly, powers, habits and acts.

Finally, we turn to the argument that the number of living species is only three. Here we need consider only brute animals, since there can be no question about *man* and *plant* as infima species. The argument turns on the single premise that if the presence or absence of a generic power is not caused by an essential difference in souls, then *a fortiori* the possession or lack of specific powers cannot be so caused. The generic power under consideration is locomotion. Now St. Thomas argues that, although there are five generic vital powers, and four grades of perfection among living things, there are only three souls; the reason being that the distinction of souls ultimately rests on the way in which "the operation of the soul transcends the operation of corporeal nature" (*Summa Theologica,* I, 78, 1). The vegetative nature transcends the operations of non-living matter least, yet there is some transcendence by virtue of self-motion, some degree of immanence; the rational nature is supreme in transcending the operations of both living and non-living matter, in so far as it possesses an operation that is not performed by any corporeal organ; and in between these two there is the sensitive nature, whose operations are "performed through corporeal organs but not through corporeal qualities" and, therefore, it has a greater transcendence than the vegetative, i. e. a greater immanence of operation, and a profounder impassibility of power. Furthermore, the powers of the sensitive nature extend to all sensible things outside the being of the subject itself, and this fact distinguishes the generic powers which belong to the sensitive soul from those of the vegetative soul. One of these generic powers is locomotion "in respect of which the soul is referred to something extrinsic as the term of its operation and movement" (*ibid.*). But the possession of this power does not raise the sensitive creature to a higher level of nature, for the grade of transcendence remains the same. Hence, the possession of locomotive power, in addition to the senses and the sense-appetite, is not caused by a distinct nature or soul. Wherefore St. Thomas concludes that those sensitive creatures which have this additional, locomotive power are merely more perfect *as* animals, but they are, nevertheless, *animals.* They exist in the grade of *being* which is constituted by the sensitive nature (i. e., they have sensitive souls), although in that one grade of being, which is animal life, there are two modes of living, the imperfect and the perfect, the "latter requiring many things for their life, and consequently movement to seek the necessaries of life from a distance" (*ibid.*; cf. St. Thomas, *In De Anima,* II, 3; and Opusc. LX, *De Potentiis Animae,* Ch. 1).

If this argument holds against those who would distinguish animal species in terms of locomotion, which is a generic power, how much more it holds against those who would differentiate animals according to the several specific powers of exterior or interior sensitivity. Therefore, we conclude that there are only three souls, and consequently no more than five species of composite substance.

Objection 3. Incontrovertible facts, both scientifically established and commonly known, show that accidents other than powers are constantly and exclusively associated with substances according to their kinds. The first position insists that only powers are properties, i. e., proper accidents; and that all other accidents are only contingent. But there are other accidents than power which satisfy the criteria of property: *quod soli et semper et omni convenit.* Thus, for example, the figure or shape of a plant or an animal is uniformly peculiar to all members of a given kind: every member of that kind always has that shape, and only members of the kind have it. So far as constancy and uniformity and exclusiveness are concerned, the accident of figure satisfies the criteria of property as much as any power of animals or plants. What is here said of figure can be said of many other accidents which plants and animals possess, such as the modes of nutrition or reproduction, locomotion or sensation, peculiar to this kind or that,—modes of operation which are associated with the possession or privation of bodily organs or with peculiarities in their structure. We may admit that these diverse modes of operation do not constitute a specific diversity of the powers named, without at the same time agreeing that only powers are properties; for one kind of plant or animal is certainly known to differ from another by the *way* in which it nourishes itself, or reproduces its kind, or moves and senses. In addition to figure and mode of operation, with which organic structure is correlated, there are still other accidents which sometimes satisfy the criteria of property in always belonging to every member of a given kind, and only to it: thus, colors and odors, among qualities; size and weight, among quantities; duration of life-span and locale of habitat; etc. Let us, for the moment, call all such traits the " constant and peculiar accidents " of a particular kind of living substance. There will, of course, be similar attributes in the sphere of non-living things, accidents which are constant and peculiar to this or that kind of non-living substance, whether element or mixture; but we shall confine our discussion to living things. Now, when an aggregate of such constant and peculiar

accidents is discovered as belonging to a kind of plant or animal,—for several of these accidents are often simultaneous, as powers are,—it must be allowed that the aggregate indicates a specific distinction.

Accidents which are constant and peculiar to a kind of substance must follow from its form; they cannot be due to its matter. What follows necessarily from a substantial form can be used to signify that form, in the indirect manner in which we have knowledge of substantial forms. Hence, either constant and peculiar accidents signify species, or there must be some *tertium quid* between a species and a merely accidental kind; and either constant and peculiar accidents are properties, as much as powers are, or there must be some *tertium quid* between necessary and contingent accidents. But in both of these dilemmas, the second alternative is impossible. Therefore, we must conclude that constant and peculiar accidents, other than powers, are properties, and that they signify species; from which it follows that we must affirm, in the light of all available observations, a large number of species of *plant* and *animal,* many more than the first position supposes. The same reasoning leads to a similar conclusion in the case of non-living things.

Reply Obj. 3. In answering this objection, it must be said at once that all the facts mentioned are readily admitted: there are constant and peculiar accidents which, in various aggregates, appear associated with this or that kind of thing. But the reasoning which is based on these facts is fallacious: these accidents are not properties and they do not signify species. We must endeavor, therefore, to show, first, the errors of reasoning involved in the objection; and then to give a tenable explanation of all the admitted facts.

The fundamental error in the reasoning is a confusion of the logical and ontological meaning of " property," similar to the confusion of the logical and ontological meaning of " species," which has already been pointed out (vd. Obj. 5 *contra* II). Convertibility in predication is the logical criterion for calling an accidental term a property of a substance. The formula " *quod soli et semper et omni convenit* " merely states this criterion; this criterion or formula is a *necessary,* but not a *sufficient,* condition of something's being a property in a strictly ontological status. It is true that every accident which is a property is, in logical discourse, represented by a term convertibly predicable of its substantive subject; but not every term which is so predicable is ontologically a property. There are three other criteria, which must be satisfied: 1) the

property of a substance must directly signify the substantial difference which cannot be directly apprehended; thus, rationality as a property signifies the substantial difference constitutive of human nature; 2) the property itself is never directly apprehended, but always known by the observation of other perceptible accidents, especially operations, actions or passions; 3) the property must not only follow necessarily from the substantial form, but it must be due to the form alone, and neither to the signate matter nor to the objective circumstances of the thing's existence or operation. By these three criteria, power and power alone can be the property of a substance. Not even the natural habits of a substance,—those constant and peculiar modifications of its powers which arise from its normal operations,—are properties. That risibility is traditionally said to be a property of man indicates how prevalent in the tradition is the confusion of logic and ontology; risibility, like the *ability* to speak grammatically, or to make things artistically, are certainly properties, in the logical sense; but when examined ontologically they are merely aspects of rationality in relation to the variety of objects with respect to which man operates. A sense of humor and grammatical speech are " natural arts " of man, constant and peculiar modifications of his rational powers functioning, as they must, in cooperation with sense and other bodily powers.[175a] If these are

[175a] The distinction between property in the logical sense and property in the ontological sense, has a number of further notes. Ontological properties exist as the powers of substances: their existence in no way depends on the operations of the substance or upon modifications due to objective circumstance. They are the direct consequence of the essence and hence are necessary rather than contigent accidents. Furthermore, ontological properties are ordered hierarchically as essences or species are, which means that they are not convertible in existence with the essence, for some of the properties of a given substance follow from its generic nature, i. e., the virtually included substantial forms, and these properties, therefore, belong to inferior substances as well. The highest powers of a substance are those which follow from the special perfection which the substantial form of this species adds to all the inferior forms it virtually includes.

In contrast, logical properties are accidental terms, predicamentally speaking, which differ from all other accidental terms in that they are uniquely convertible with a substantive term or with its definition. Such convertibility means that the logical property is derived from the whole essence, as defined, and not from one or another of the essential principles, i. e., the difference or the genus. Thus, such logical properties of man as risibility, grammatical ability, political ability, do not follow from man's rationality alone or man's animality alone, or from any other more generic note. They follow from man's rational animality, for a man could not laugh at wit or speak grammatically unless he was both rational and an animal. If, now, we ask the ontological question, what mode of being is designated by the terms which the logician classifies as properties in the case of man, the answer must be that such terms designate *potential modifications* of several powers in conjunction,

not powers, and hence not properties, how much less so are modes of operation which depend merely upon peculiarities of bodily arrangement or objective circumstance; and even less are such things as figure, color, duration, place, etc. For all these are directly observable accidents; they obviously do not follow from the substantial form alone; nor do they signify a substantial difference directly, as the intellectual powers of man, the proper accident of human nature, signify rationality, as the substantial difference, united with animality, as the generic nature, in the constitution of the human essence. Although we have discussed the essence and property of man, because the second position admits man to be an infima species, what has been said here applies universally to the relation of essence and property. Therefore, we must conclude that none of the so-called constant and peculiar accidents mentioned in the objection are properties (necessary or proper accidents). They are all contingent or adventitious accidents.

But it may be answered that even if they are not properties, according to the restricted meaning with which we insist upon using that word in ontological discourse, they are nevertheless signs of specification because of their convertibility. Supposing that we know quidditatively only the essence of *man*, it may be said that in every other case we must determine species by reference to extrinsic signs (contingent accidents), and for this purpose we select those which, singly or in aggregate, are constantly and peculiarly manifested by a given kind of substance. This sort of answer has already been rebutted, first, by showing that the use of such signs necessarily violates the principle of ontological hierarchy (vd. Obj. 3 and 7 *contra* II); and second, by showing that the demonstration of hierarchy and the argument based on an exhaustive enumeration of powers from our adequate knowledge of human nature, makes any appeal to ignorance an impossible evasion (vd. Replies Obj. 1 and 2 *contra* I). Hence, the accidents mentioned in this objection, not only are contingent rather than

never a single power alone. They are not powers, but potential developments of cooperative powers, of which some flow from the generic, and some from the differential, nature of the species. In this respect, they are like the "capacity" for any virtue or art—not a power, but the normal *tendency* of several powers, as toward a result of their cooperation. Speaking ontologically, the terms which the logician calls properties name necessary accidents only in so far as there is the contingent necessity that *if the powers develope cooperatively,* such capacities will be developed. But any actualization of such modifiability,—any development of risibility or grammatical ability,—is a contingent accident. Like the virtues in general, such developments are not necessary for the mere existence of a substance as that sort of substance, but only for its perfection.

necessary, but cannot, in any case, be used to signify specific distinctions.

There remains, however, one burden which the objection imposes on us. We must explain the constancy and peculiarity of *some* contingent accidents, for *all* are not of this sort. The objection maintains that such constancy and peculiarity can *only* be explained by their following from the substantial form, and that is why it asks us to regard them as properties, even if they are not powers. But in this the objection errs, for they can be otherwise explained. Contingent accidents are of two sorts, which can be distinguished as separable and inseparable.[176] But those which are *inseparable* are, nevertheless, *contingent,* which means that they are inseparable from a particular unit of matter, and not that they are consequences of the substantial form, for then they would be *necessary.* In other words, certain accidents belong constantly and peculiarly to certain kinds of substance because they follow from the determination of the signate matter in generation. According to St. Thomas, the signate matter, involved in generation and individuation, has determinate dimensions (*De Ente et Essentia,* II); but it has other determinations as well, which modern genetic researches have discovered,—i. e., the pattern of the genes and chromosomes, as well as other cellular structures. The constancy and peculiarity of certain accidents is due to a constant and peculiar structure of the signate matter (i. e., the germ plasm) throughout a series of generations. In short, both constant and variable (inseparable and separable) accidents are contingent because they are due to the matter, and not the form; yet both are not related to

[176] It is necessary to explain how the words "separable" and "inseparable" are here used. Aristotle speaks of an inseparable accident as one which cannot be conceived apart from the subject in which it inheres, as, for example, the snubness of a nose (*Meta.,* VI, 1). This, it seems to me, is purely a verbal matter, due to the conventional usage of a word like "snub" rather than to anything in the nature of the case. Other examples of inseparable accidents *in this sense* are seldom given or discussed. The present distinction between separable and inseparable accidents must not be confused with Aristotle's point, even if the latter is not trifling. The present distinction turns on whether the accident in question is a term of accidental change in a subject of a certain, determinate constitution. If the subject cannot change with respect to a certain accident without changing in its fundamental character as that subject, then the accident is inseparable. The inseparability of an accident from its subject, such as the configuration of an animal or the coloration of a plant, does not make it a proper accident; for whereas all properties are necessarily inseparable accidents, contingent accidents may be either separable or not. Thus, for example, sexual characteristics are contingent accidents, but they are nevertheless inseparable from individuals constituted in one or the other gender. On this point, see Aristotle's discussion of sex in *Meta.,* X, 9.

matter in the same way: the variable, or separable, accidents are, according to a post-predicamental analysis, terms of motion, i. e., the three sorts of accidental change; whereas the constant, or inseparable, accidents are terms of generation, i. e., they are involved in the determinateness of the signate matter and hence are constant and peculiar accidents of the substance thus generated and individuated. The separable accidents are those which an individual can acquire or lose as a result of his own operations, his second acts; the inseparable accidents are those which an individual possesses from generation to corruption; they are involved in his first act, since he is constituted by a substantial form individuated by signate matter. As the powers flow from the substantial form, so the inseparable accidents are in the signate matter. Therefore, in a sense there is a medium, or *tertium quid,* between property strictly and accident: for if the latter be understood, not only as contingent but as separable and variable, the inseparable or constant accidents, belonging to the substance because of the signate matter, are as a mean. For properties are both necessary and constant, and some accidents are both contingent and variable: the mean consists of those accidents which are both contingent and constant.

To which it may still be objected that the constant and peculiar accidents referred to are not individual, but belong to kinds of plants and animals. This fact is admitted, but it does not alter the analysis because the kinds referred to are not specifically, i. e., essentially, distinct. They are accidental classes, races, varieties, etc., sharing the same specific nature, as individuals do, and differing accidentally from one another, as individuals. This can be readily seen in the case of human nature, which the second position agrees is infima specific. There appear to be diverse races of men, such as the caucasian, the negroid, the mongoloid, etc. These are "kinds" of men, and each kind has certain constant and peculiar accidents, inseparable from each individual of the kind from birth to death, and transmitted to offspring in generation. Moreover, within such races, there are inbred family groups which manifest the same sort of constancy in minor characteristics. Now, if the constant and peculiar presence of certain traits in all members of a kind, or of a group of individuals, existing simultaneously or related by generation, is the sign of specific distinction, then *man* cannot be an infima species. If, however, that conclusion is repugnant, then it must be admitted, in the case of other plants and animals, that inseparable accidents, found constantly and peculiarly in all the members of a group, signify racial (accidental) distinctions, and not specific (essential) ones. Racial distinctions are like individual

differences in that they are accidental. The accidents on which they are founded are all contingent, i. e., adventitious to the specific nature. There is this difference, however: individual accidents may be either separable or inseparable as, to exemplify the latter, sexual characteristics; but if inseparable, they are not possessed uniformly or for the most part by all members of the group; whereas racial accidents are only the inseparable ones, and they are possessed always, or for the most part, by members of the group, though not always in the same degree. That individuals are variable within races is due to the fact that some individual accidents are separable, and to the fact that some inseparable accidents are not uniformly present in all members of the group; that races are variable within species is due to the fact that racial accidents, though inseparable, are contingent, vary in degree, and may change with changes in the structure of the signate matter. The main point here is that racial and individual differences are sub-specific for the same reason, namely, that they are constituted by accidents caused by the signate matter involved in generation. That explains why both individual and racial differences are inherited. It may even explain why individual and racial differences are distinct from one another in only a statistical way for, as modern genetics points out, racial types are present, not in individuals, but in populations distributed normally with respect to a certain aggregate of traits, present more or less in the individuals of the group according as they approach or recede from the norm (Dobzhansky, *Genetics and the Origin of Species*, Ch. I, X).

Now, it cannot be argued that an inseparable accident must be due to the substantial form, for sex is such an accident, as Aristotle says in *Meta.*, X, 9, and it is obviously due to the signate matter in generation. Nor can it be said that form is always the principle of sameness and matter the principle of difference, for form is obviously the principle of specific difference as well as specific sameness, and matter can equally be the principle of individual or racial sameness, as well as the source of such differences. This is incontrovertibly evidenced by the case of identical twins in human procreation. Finally, it cannot be argued from the principle that, in the order of accidents, quantity is prior to quality, therefore power cannot be nearer to the substantial nature than other accidents, especially dimensional ones. The principle as stated is false, because it fails to distinguish proper from contingent accidents: among contingent accidents, quantity is prior to quality, for contingent accidents are due to the matter, and of qualities, figure is primary, because it is a quality about quantity. But that is no

reason why a quality, such as power, should not be prior to all other accidents when it is rightly regarded as a proper accident, and hence due to the form; and then habit is next because it is a mode of power. Of all the accidents of a living substance, some (powers) follow directly from its form and hence can signify its specific nature; some belong to it solely because of its signate matter (such as quantities and the qualities they underlie, or the bodily organizations which underlie modes of operation) and these signify racial type; and some are due either to the matter or to the individual's own operations (either inseparable accidents which are not common to all members of the group, or separable ones), and these are marks of individual difference.

Although we have only considered animate substances, this discussion suffices to answer the objection which was itself largely drawn from biological facts. We have shown that the facts *cannot* be interpreted as the objection supposes, nor do they *need* to be, for a contrary interpretation is possible and no difficulty arises from making it.

Objection 4. In addition to those already cited (Obj. 3 *contra* I), there are other well-attested facts which are difficult to explain according to the theory of the first position. The facts of procreation in the sphere of living things amply testify to the production of like by like. It is not simply that plants reproduce plants, and animals animals, but that this kind of plant uniformly tends to procreate organisms of the same kind, and similarly in the case of kinds of animals. Such uniformity in generation, furthermore, is connected with the aggregate of traits which constantly and peculiarly typify a kind of plant or animal; in other words, if a given kind is distinguished by an aggregate of traits found among all its members and only among them, the offspring will manifest the same traits in aggregate, and this is what is meant by like producing like. Thus, Monaco defines a species as "a collection of individual living things which preserve the same powers and the same type through the generation of one from the other" (*loc. cit.*); and his definition would hold for other accidents than power which, taken together, constitute the type.

Now, it can be learned that Monaco and others, who take genetic uniformity as a sign of specificity, are right, by applying a fundamental principle to the facts cited. According to St. Thomas, "the likeness of the begetter to the begotten is on account not of the matter, but of the form of the agent that generates its like"

(*Summa Theologica,* I, 119, 2, ad 2). Furthermore, the substantial form is the term of generation (i. e., substantial change). Hence to say that like generates like, in the reproduction of living things (*Summa Theologica,* I, 118, 1), is to say that the likeness between the begetter and the begotten must be in regard to substantial form. Wherefore we must conclude that if this kind of plant or animal generates its like in kind,—i. e., if roses generate roses, and potatoes potatoes; if camels generate camels, and sparrows sparrows,—then all of these many kinds, which preserve their type throughout a series of generations, must be species. Otherwise, the term of generation would not be a substantial form, which is impossible. So it is shown that *plant* and *animal* are not infima species, but extensive genera including many specifically distinct kinds.

Reply Obj. 4. Here as before the facts are readily admitted, but not the interpretation which the objection puts upon them. The interpretation is rejected for reasons which have already been made clear, namely, the role of signate matter in generation (Reply Obj. 3 *contra* I). The signate matter, which is determinate not only in dimensions but in other accidental respects, is the source of racial and familial accidents, as well as individuating ones. Hence, the uniformities in biological reproduction are due partly to the substantial form, in so far as the offspring are like their ancestors in species, and partly to the signate matter, in so far as the progeny resemble their procreators in merely accidental respects.

This will be seen at once if the facts are re-considered. There is uniformity in the generation of men of different races; thus, caucasians generate caucasians, and negroes negroes, if the breeding is restricted to individuals of the same stock. But we know that these are races, not species, and hence we must admit that this generation of like by like cannot mean that the term of generation is a substantial form, taken simply. It must rather be regarded as a substantial form (the principle of specific human nature) subject to further accidental determinations of a racial order. There is no more difficulty about this than that one individual should procreate another which is individually different because the substantial form which is alike in both begetter and begotten is, nevertheless, individuated differently in each, i. e., subject to further accidental determinations of an individuating sort. Nor need the begetter and the begotten always differ in their individual traits; they may also resemble each other in various accidental ways; but this cannot be due to their likeness in substantial form, since contingent accidents

do not follow from the form. Hence it must be due to the condition of the signate matter in generation.

In short, both racial and individual similarities between ancestors and progeny can be explained in the same way by reference to the role which signate matter plays in generation; in fact, they cannot be explained in any other way, because these similarities are with respect to contingent accidents, and they cannot be due to the substantial form. It does not follow, therefore, because roses generate roses, or camels camels, that these "kinds" are species. If there were other and independent evidence that *rose* was a species, there would be no need, of course, to have recourse to uniformity in generation to prove the point. But since such evidence is either lacking or not relevant, the facts of generation by themselves are totally insufficient because they can be, and must be, otherwise interpreted.

The error which the objection makes is to suppose that form is always the principle of sameness and matter of difference; whereas, as we have seen (Reply Obj. 3 *contra* I), things may be specifically different in respect of form, and alike because of material accidents. And this applies also to the like and the unlike in the process of generation: matter, as signate, is the source of both differences and similarities of an accidental sort, whereas substantial form is the principle of essential sameness and distinction. Furthermore, the authority of St. Thomas in this connection may be disregarded, for what he says in the text cited is explained by his unavoidable ignorance of facts about generation which modern researches have discovered. In that same text (*op. cit.*, I, 119, 2, ad 2), he writes: "In order for a man to be like his grandfather, there is no need that the corporeal seminal matter should have been in the grandfather; but that there be in the semen a virtue derived from the soul of the grandfather through the father. . . . For kinship is not in relation to matter, but rather to the derivation of the forms." But we know that there is a continuity in the germ plasm which is transmitted from generation to generation, as well, of course, as variability in its microscopic structure. It is, thus, in terms of the matter that relations of kinship are to be explained, and not simply through the derivation of forms. Both principles are required if we are to account for both specific nature and accidental traits, racial or individual, whether we are considering the similarities or the differences of living organisms. Error results from ignoring either principle, as the ancients from excusable ignorance neglected, in part at least, the contribution made by signate matter; and as some

moderns, from culpable neglect of philosophy, fail to take account of substantial form, and hence either deny true species or else futilely seek to explain all uniformities in generation by reference to material dispositions.

Finally, it must be acknowledged that, in answering this objection and the previous one, we have presumed to speak about the nature of generation and the role of signate matter therein, without undertaking a complete analysis of these matters. The presumption seems justified, however, in the light of the traditional discussion of such problems.[177]

Objection 5. According to the first position, a gardenia and a mushroom, an elephant and a butterfly, differ only accidentally, and not essentially. But this is preposterous. Things so remote from one another in character, things extremely unlike in so many respects, must differ essentially. Furthermore, the first position requires us to say that an anthropoid ape and a man, differing essentially, must be more unlike than an oyster and a chimpanzee which differ only accidentally, for no accidental difference can cause a greater distance between things than an essential difference. But this is also preposterous. The chimpanzee is much nearer to man than to the oyster because there is only one specific gradation between man and ape, and many between ape and sessile shellfish. In the order of living things there is a continuous progression from lower to higher forms, as Aristotle says (*Historia Animalium* VIII, 1); and St. Thomas epitomizes this insight by saying that "the higher nature in its lowest degree touches the lower nature in its highest degree (*Summa Contra Gentiles,* II, 91). But such inequalities of nature, or degrees of perfection, must follow upon a diversity in species. Hence, the greater inequality between ape and oyster must indicate that they are more removed from each other by intermediate gradations of nature (i. e., by a larger number of specific differences), than are ape and man.

[177] The traditional account of generation is not without its difficulties. These will be examined in the third article of this series, dealing with the problem of substantial change. Whether or not the difficulties to be considered affect the points made in the answers to Obj. 3 and 4 *contra* I, cannot be here judged. But one thing is clear: the arguments stated, both in the objections and the replies, hold only in the sphere of living things. Substantial change is radically different in the case of non-living things, and this, of course, is related to the difference between substantial forms and species in the two spheres. The third article thus depends in a way on the resolution of the problem about species; but it may also contribute points that will be decisive with respect to that resolution.

REPLY OBJ. 5. There are several answers to this objection. In the first place, it begs the question by assuming that an ape and an oyster must be essentially different because they appear to be unlike in so many respects; similarly, in the other examples mentioned. But this does not follow at all, because if two things are essentially alike, as all animals are, and all plants, they may differ in any number of accidental traits. The apparent similarities or differences among things, making them *appear* near to one another in nature or remote, cannot be used thus in an argument, because it must first be shown that the respects in which the things are like or unlike are either accidental or essential. If, as previous discussion has demonstrated (Reply Obj. 1 and 2 *contra* I), the second position erroneously employs contingent accidents as specifying signs, though they cannot specify because they fail to hierarchize and because the analysis of powers indicates their irrelevance, then it cannot be said here that gardenia and mushroom, or elephant and butterfly, are different species, however much unlike they are in accidental respects. In short, an essential difference can exist between things which are otherwise very much alike, as between certain kinds of plants and animals; and two things which are different in many accidental respects, such as the examples cited, can nevertheless be essentially, i. e., specifically, the same.

In the second place, we do not deny a vast range of accidental differences within species, which constitute a great diversity of plant and animal varieties or races; nor do we deny the obvious progression, within each species, from lower to higher types. But the progression of accidental classes within species is not the same as the hierarchy of specific forms; for the former can be viewed as approximating a continuum, whereas the latter cannot. In other words, the progression is a matter of degrees of accidental perfection and not an order of grades of substantial being. This is indicated by the fact that between any two species, as diverse grades of being, there is no intermediate, actual or possible, whereas between any two races, as having degrees of accidental perfection, intermediate specimens can be found or are at least thoroughly possible. As St. Thomas points out, one accident may be more perfect than another (*Summa Theologica,* I, 75, 7); since all subspecific classes are constituted by substantial forms existing under further accidental determinations, one of these classes may be more perfect than another, in an accidental way, just as one species is more perfect than another in an essential way. In the same text,

St. Thomas says that "contraries are compared to one another as the perfect to the imperfect, since *the principle of contrariety is habit and privation thereof.*" (Cf. Aristotle, *Metaphysics,* X, 1055[a] 35.) But this principle of contrariety applies *only* to substances, for one is more perfect than another by the possession of a power, of which the other is deprived. Accidents, however, are contrary in a different way, as extremes of a series, or as intermediates varying in degree between the extremes. Thinking of contrariety in this second sense, Aristotle denies that there can be contrariety among substances (*Organon, 5*). Thus we see that the sort of contrariety which can exist among substantial forms,—namely, the incompossibility of privative opposition,—orders them hierarchically; whereas the sort of contrariety which exists among accidental forms enables them to be ordered continuously; this accords with the distinction between substantial contrariety (form and privation) and accidental contrariety (contrary forms), as expressed by John of St. Thomas (*Phil. Nat.*, P. I, Q. 2, A. 2). Accidental classes, like the accidental forms which determine them as sub-specific kinds, can also be ordered continuously. This explains the continuous progression from lower to higher kinds of plants, and from lower to higher kinds of animals, the higher in each case being constituted either by more accidental determinations or by accidents which are more perfect in the sense of more fully realizing the distinctive powers of the species; for, as Aristotle says, "throughout the entire animal scale there is a graduated differentiation in *amount of vitality and in capacity for motion*" (*loc. cit.*); he might have added also: *in amount of sensitivity and in capacity for cognition.* The lower nature (inferior species) in its highest degree (most perfect accidental embodiment) touches the higher nature (superior species) in its lowest degree (least perfect accidental embodiment). In one sense, there is no contact because the natures are separated by a whole hierarchical step, which is an absolute and indivisible separation caused by *habit and privation.* But if living things be considered merely in the degrees of accidental perfection with which they embody the forms of life,—i. e., degrees of vitality, motion, sensitivity, etc.,—then they can be ordered in continuous series, and there can be contact between the most perfect plant and the least perfect animal, as within the animal species less and more perfect races either touch or intermediate kinds can be imagined which would establish contact. In some cases, the intermediate kinds can be actually bred.

In the third place, we can argue hypothetically as follows. Let

A and B represent two kinds which are very much alike, and let X represent a kind which is extremely unlike B. Now if the objection takes the amount of likeness or unlikeness to be indicative of specific sameness or difference, it will be reduced to the following absurdity. On the one hand, if A and B are said to be essentially the same because they are similar in so many respects, and this reasoning is applied to B and C, C and D, and so forth until, in a series of comparisons, W and X are reached, then it must be concluded that A and X are also essentially the same, because they are connected by a series of terms in which every proximate pair is essentially the same. On the other hand, there can be no repugnance to saying that A and B are essentially different, even though they are alike in many respects, if we can see that A and X are essentially different for the same reason that A and B are. By substituting man for A, chimpanzee for B, and oyster for X, the absurdity of arguing about specific sameness or difference from mere quantity of likeness, is given concrete meaning. The absurdity arises from considering merely the quantity of likeness or unlikeness without dividing the total into its component accidental and essential notes.

Finally, and most important of all, the objection gains apparent strength (i. e., *rhetorical force*) from an exclusively static view of living things, as existing immutably in a vast plurality of more and less dissimilar kinds. But if most of these kinds,—in fact, all that are subordinate to *plant* and *animal*,—are accidental classes (i. e., races or varieties in the sense indicated), and if such kinds are not immutable but have developed from one another in a long, historic process of descent, in which there is both generation of like by like and also generation of the unlike when evolutionary mutations occur, then what at first seems preposterous about saying that chimpanzee and oyster are only accidentally different, is profoundly altered. Between any two kinds which are only accidentally different, however remote they may now *appear*, there have been developmental or genetic connections. If all of these were known, that is, if the whole evolutionary series could be constructed, a continuum would be established which is now only fragmentarily realized in existing varieties of *animal* or *plant*. In other words, B and X are made to *appear* essentially dissimilar because they are disconnected by the absence of intermediate kinds in a series made up only of specimens existing at our time level. But nature has a history; in other words, a species has a history, in the course of which that specific nature undergoes many transformations so far as its accidental embodiments are concerned. That species not only now exists in many varieties, but it has at other time levels existed

in an even greater number of varieties which have come and gone. If this dynamic view of nature were substituted for a static one, the objection would lose all its force, because it is not preposterous *historically* to say that mushroom and gardenia, butterfly and elephant, are only accidentally different. On the contrary, in view of all the evolutionary facts, it is preposterous to say that they are distinct species if, in the philosophical meaning of "species," a specific nature is immutable, i. e., *cannot be generated by or generate another species through the operation of secondary causes alone.*

Objection 6. According to the first position, we possess real definitions of all the natural species that exist; or, at least, we know the essence through knowing the properties, as in the case of *man* we know *rationality* as a property. Hence the first position must be able to name the property in terms of which we apprehended the essence of *element* as an infima species; and similarly in the case of *mixture*. None of the qualities enumerated by the second position in its discussion of elements and mixtures is satisfactory because their relation is judged inconsistent with the hierarchical ordering of species. Furthermore, it has been said that only powers can be properties. What, then, are the powers which flow from the essences of *element* and *mixture* and in terms of which these essences are really defined?

Reply Obj. 6. The validity of the objection must be admitted; the question raised cannot be answered. In the case of non-living things, we do not know the specifying properties (the powers) as we do in the sphere of animate substances. It is possible to conjecture what the properties of *element* and *mixture* may be: the power of local motion may be the property of elemental bodies; and the power of alteration (qualitative change) may be the property of mixtures. In both cases, of course, the powers would be passive and passible, and the operations flowing from them would be transitive, since active and impassible powers are exclusively vital properties. But this is conjecture, not knowledge. Lacking knowledge of the properties, we cannot claim to possess real definitions of the essences. We cannot even be certain that there are two species of inanimate substance, for such certainty would repend on knowing the specific difference between *element* and *mixture*. But if we do not know the properties of either, we cannot name the difference which is added to the elemental nature to constitute the nature of a mixed body. There may be only one species of inanimate sub-

stance, as is sometimes suggested by St. Thomas when he says that "we observe in matter various degrees of perfection, as existence, living, sensing and understanding" (*Summa Theologica,* I, 76, 4, ad 3). He more frequently writes, however, as if there were two forms of inanimate substance: "the form of a mixed body has another operation not caused by its elemental qualities. And the higher we advance in the nobility of forms, the more we find that the power of the form excels the elementary matter, as the vegetative soul excels the form of the metal, and the sensitive soul excels the vegetative soul" (*ibid.,* 76, 1; cf. *ibid.,* 76, 4, ad 4). Furthermore, he appears to distinguish the proper accidents (properties) which pertain to a thing as *existing* from those which pertain to it as *corporeal* (*ibid.,* 76, 6, ad 1). In other words, the substantial form in virtue of which a thing actually exists is not the same as the substantial form in virtue of which it exists as a body; and this would mean that there are two species, hierarchically ordered, both inferior to the lowest grade of soul.

Our situation remains the same, however, whichever alternative we chose. Whether there be two or only one species of inanimate substance, we do not know the specifying properties of such substances, as we know them in the case of living things, *unless* we are right in supposing that they are simply the passive and passible powers of transitive operation, relative to any kind of change or motion. Such powers are nothing but material potentialities, the potentialities of non-living matter for local motion, alteration, increase and decrease. Until the supposition is verified, we cannot even begin to answer the question put by the objection.

Our failure to answer this question does not, however, provide grounds for asserting that there are many species of *element* and *mixture.* That there cannot be more than two follows necessarily from the fact that there are only three species of animate substance. That the simple qualities are not proper accidents of specifically different elements, which St. Thomas says (*Summa Theologica,* III, Sup., 79, 1, ad 4), follows necessarily from the fact that these simple qualities are accidental contraries; hence they do not hierarchize and cannot be specifying signs. The same argument applies to the qualitative blends which St. Thomas supposes specify diverse mixtures.

Nor can the failure to answer this question be regarded as inconsistent with the theory of our knowledge of species, attributed to the first position. As already indicated (Reply Obj. 2 *contra* I), we know the powers of all things through our understanding of

human nature. Since the human soul virtually includes all inferior forms, the powers which belong to all inferior substances are possessed by man, and these are ordered as more or less generic properties according as each flows from a nature that is more or less generic in the constitution of the human composite. But our reflexive knowledge does not extend to all these powers equally: thus, we can understand our sensitive powers better than our vegetative ones, because in so far as they are co-operative with intellect, they fall within the direct light of the intellect's reflexivity; similarly, we can understand all our vital powers better than the merely material potentialities which we possess *qua* bodies. It is not surprising, therefore, that we know the properties of *animal* and *plant,* and are relatively ignorant in the case of *mixture* and *element,* or of *inanimate substance,* if that be an infima species. This does not mean that we shall never be able to determine whether there are two or one species among non-living things, or to formulate real definitions of the essences when that determination has been made. A genuine advance in analysis is possible in this field, on the condition that we are willing to depart radically from the traditional view of inanimate substances, especially with respect to their substantial forms. But even if this be accomplished someday, it will always remain true, for the reasons given, that we shall understand the properties of non-living substances less adequately than vital powers.

Objection 7. According to the first position, every specific nature is constituted by a difference added to a genus; and in each case the genus is a proximately inferior nature virtually included in the superior form. But even if the first position could say what the substantial difference is in the case of *element,* through knowing the property, it could not say what the genus is, since there is no inferior nature. Hence either *element* is not an infima species, but a genus, subsuming a diversity of species of the sort enumerated by the second position; or the first position's theory concerning the constitution of natural species, as composite essences, has a major exception in the case of *element* because it is the least perfect infima species. In either case, the principle of hierarchy is violated. The inevitability of such violation would seem to indicate that the principle is itself false, for applying it to *element* leads either to abandoning it, as in the first alternative, or to self-contradiction, as in the second. These consequences cannot be avoided by saying that *element* and *mixture* are not specifically

different and that there is only one infima species of inanimate substance, for the same argument applies to any form that is regarded as being the least substantial perfection of matter. Nor can such things as "substance" or "matter" be posited as the genus of *element,* or whatever is said to be the lowest grade of substance, for then such things would also have to exist as inferior species, since according to the first position, the generic form which exists virtually in a superior species must exist actually as the form of an inferior species. But this is clearly impossible in the case of "matter" or "substance." Therefore, we must conclude that the problem about *element* shows the major principles of the first position to be untenable.

Reply Obj. 7. The objection is sound in so far as it points to difficulties about the nature of *element* or, more generally, any substantial form which confers the lowest grade of perfection on matter. But the conclusion it draws does not follow; for if the principle of hierarchy is demonstrated as we maintain (Reply Obj. 1 *contra* I), that demonstration is not destroyed by difficulties in applying the principle in a particular case. It does not follow, therefore, that we must accept the second position's account of elements and mixtures, for that account violates the truth of hierarchy in every case, in living as well as non-living things; nor does it follow that the principle of hierarchy has a major exception in the case of *element,* for that, too, is impossible, since according to the manner in which it has been demonstrated that truth can have no exceptions. It cannot be a metaphysical truth that the essence of every composite substance is composite, if that truth does not apply to *element,* unless elemental bodies are not composite substances, which is equally impossible. And upon this basic truth depends the demonstration of ontological hierarchy and the analysis of the constitution of substantial species. Therefore, neither alternative suggested by the objection can be taken without denying this basic truth.

Yet the difficulties pointed out remain, and some other explanation must be found. The same sort of answer seems available here, as in the reply to the previous objection. We do not appear to understand the nature of inanimate substances well enough to know the powers by which they can be specified. In the case of *element,* or whatever form is least perfect, we are not only ignorant of the substantial difference because we do not know the property, but we are also ignorant of the generic constituent in the essence. In short, we do not seem to understand substantial forms in the

sphere of inanimate substances, as we understand souls in the realm of living things. It is at least possible, as Gilson suggests, that our failure here is a major defect in the tradition of hylomorphism, a defect which is curable because due to the initial and corrigible error of supposing that the being of " substantial form " is univocal in the two spheres (*Le Réalisme Méthodique,* III: *La Spécificité de L'Ordre Philosophique*). In the light of this suggestion, it can be concluded that better work must be done in the analysis of non-living substances before we shall be able to solve the difficulties presented by the objection. Not by giving up hierarchy and the truth about the composition of essence, but by undertaking further inquires guided by these principles, can we hope to attain a better understanding of inanimate things, as to genus, difference, and species.

21. What judgment can be made as to the relative merits of the first and the second position, in the light of the foregoing dialectic? There are three possibilities: (1) the dialectic has resulted in an impasse, with neither theory having an edge of superiority; (2) one of the theories is seen to be unquestionably and unexceptionally right, and the other wrong; (3) though qualified by exceptions and unsolved difficulties, one position is, nevertheless, more clearly justified in its claims than the other. If the first possibility has occurred, then the problem of species may be genuinely insoluble; the balance of evidence and reasons on both sides may indicate an antinomy and, ultimately, a mystery. But that does not seem to me to be the case. The problem of species is not a mystery. If the second possibility has occurred, then the problem of species is not only soluble, but solved. That, however, is not the case either. It is the third possibility which I would say has been realized. The problem remains in the realm of the soluble, although something has been accomplished toward its solution by virtue of the preponderance of one of the two theories over the other. Which of the two? This may seem like a difficult judgment to make, but I find myself compelled to say that I think the first position is better than the second. Following are the reasons for my judgment.

In the first place, many of the replies to objections raised against the second position turned upon a challenge to the first position to prove its point concerning hierarchy, or the number of souls, or powers as properties. This was wholly the case in Obj. 1, 2 and 3 *contra* II, and partly so in many of the other objections, especially Obj. 4, 5 and 6. If the first position could demonstrate these points, it would not only succeed in answering objections brought against

itself (*e. g.*, Obj. 1, 2 and 3 *contra* I), but more than that it would put the second position at a real disadvantage by showing that it had failed to answer many objections. This, it seems to me, is what happened. The first position did demonstrate its points about hierarchy, souls and powers. With regard to hierarchy, I think the demonstration is without flaw. With regard to the number of souls, the demonstration is less perfect since it leaves several alternatives within the one conclusion it establishes, namely, that the number of souls is less than ten. But that conclusion, combined with the fact that, according to the reasoning involved, *plant* is an infima species, suffices to negate the second position. With regard to the point about power,—a point, by the way, on which the numbering of souls depends,—the proof that various *modes* of vegetation, locomotion, sensation, etc., do not indicate further *specific divisions* of the powers named, rests on the validity of the traditional criteria for specifying powers according to formal differences in their objects. The traditional criteria were used without being fully justified.[178] This may be a weakness in the argument for the first position. But with these allowances made, it is still my judgment that the demonstrative accomplishment of the first position both tends to establish its case and also to leave its opponent facing many objections it cannot satisfactorily answer.

In the second place, the first position succeeded in meeting objections founded upon the observed facts in the sphere of living things, such as the one about accidents belonging constantly and uniformly to all members of a group (Obj. 3) and the one about like producing like in the process of generation (Obj. 4). It must be granted that these objections were answered in the light of prior demonstrations concerning hierarchy, etc., but this does not weaken the force of the answers. Furthermore, in every case, the answers were supported by an appeal to the same order of facts as unfounding the objections. If there was any weakness in these answers, it must be located in the assumptions made concerning the nature of substantial change, and the role of signate matter therein. For the most part, these assumptions seem to have the authority of tradition, but authority is a weak form of argument.[179]

In the third place, the objection saying that it was preposterous to consider such dissimilar things as elephant and butterfly as only accidentally different (Obj. 5 *contra* I), was adequately answered.

[178] It was acknowledged that this problem was itself so complex as to require a separate article, the third in this series. Vd. fn. 176, *supra*.

[179] It was acknowledged that the problem of substantial change required a second article for adequate consideration. Vd. fn. 177, *supra*.

Though the answer pointed to some further problems concerning evolution *within* species, the problems indicated in no way weakened the force of the reply.

In the fourth place, the second position not only failed, wholly or partly, to answer every objection which rested upon points about hierarchy, souls, powers (Obj. 1, 2, 3, 4, 5, 6), but did not give entirely satisfactory answers on other counts. Thus, in the case of Obj. 6, which charged equivocation in the use of the word "species," it was insufficient to answer that *man* is unique as an infima species of *animal*, which also differs generically from *brute* as a genus, because the point of the objection could have been made in terms of *plant* and *animal*: the second position affirms that *plant* is the genus of *animal* as a sub-genus or species, but it uses the words "genera" and "species" equivocally when it also affirms that *animal* is a genus having other sub-genera or species. The second position confuses logical and ontological hierarchy and thus is led to equivocate in the use of its principal words. Furthermore, in answering Obj. 7, the second position denied a rule which, in other cases, it had accepted without qualification, namely, that specifying signs, whether they be properties or contingent accidents, must be related as the essences they signify. The denial in this case was occasioned by its effort to avoid the charge that, in its treatment of elements and mixtures especially, though in the sphere of living things also, it had violated an antecedent principle concerning the relation of substances. The denial was not properly justified by an appeal to our ignorance of essential natures; and, with the denial removed, the violation of the antecedent principle stands as charged. Moreover, in answering Obj. 3, the second position did not meet the point that animals could not be specified by reference to modes of vegetative operation, such as types of nutrition or reproduction, even if such modes were admitted to be species of power. Finally, the second position's answer to Obj. 8 was at best incomplete, because it merely said that the scientific evidence, which *seemed* to weigh against it, had to be otherwise interpreted, but it did not make the interpretation concretely. This must be combined with the fact that the first position actually made an interpretation of the findings offered by biological science, which showed the evidence to be entirely conformable to its theory (in Reply Obj. 3, 4, and 5 *contra* I).

Weighing the arguments for and against both positions thus shows the superiority of the first. It may be asked now why we are not compelled to deem the first position *true*, instead of merely *better*. There are two reasons for this. In the first place, there are,

as we have noted, some imperfections and some unexamined premises in the arguments upon which the first position rests its case most strongly. And, in the second place, we must take account of Obj. 6 and 7 which the first position failed to answer. These objections showed that, however strong the first position may be in the sphere of living things, it faces genuine difficulties with regard to inanimate substances. In contrast, the second position has no greater difficulty in dealing with the inanimate than with the animate. To argue that there are not more than two species of nonliving substance, the first position must rely upon its proof that there are only three souls and upon the principle that whatever the number of living species, the number of inanimate species must be less. But it fails, in any case, to give an account of the nature of such inanimate substances as there may be: it cannot name their properties; it cannot solve the problem of the generic constituent in the nature of the least perfect substance. The first position tries to meet these points by confessing its ignorance of the nature of inanimate substances. Even though the second position sometimes hides behind confessions of ignorance, it faces no difficulties, arising from its own principles, as great as those propounded by Obj. 6 and 7 *contra* I. The disadvantages which the second position suffers arise from the demonstration of contrary principles by its opponent, and not from internal difficulties. Our chief uncertainty about the relative merits of the two positions is located here: which sort of defect is more serious? In order to answer this question, we must now continue our estimation of the theories by considering the epistemological aspect of the dialectic. Both positions, at various places, defend themselves by confessing their ignorance about essences. To what extent does ignorance excuse them?

22. We have previously seen that the epistemological aspect of the problem about species cannot be solved, unless the ontological problem is independently argued as, for the most part, it is in the foregoing dialectic.[180] But in this respect the two positions are not equally sound. The second position, having a much less definite conception of the objective ordering of species, tends to account

[180] Vd. Part III, Section 13, *supra*, which concluded with the statement: "the issue concerning our knowledge cannot be resolved unless there are extrinsic (ontological) criteria for judging whether what is known by a real or a nominal definition exists as an infima species. Hence, unless such extrinsic criteria can be found in the philosophy of nature, neither the ontological nor the epistemological problem concerning species can be solved. One thing is clear: . . . the nature of our knowledge, its relative perfection or imperfection, is no basis for inferring anything about the nature of things, so far as specific distinctions go."

for many of its difficulties, such as its apparent inconsistency with an antecedent principle (Obj. 7 *contra* II), by saying that these are due to our inadequate knowledge of essences and properties. In fact, the second position often argues in the following circle: it says, first, that we possess adequate knowledge only in the case of *man*; then it says there are many other natural species, but of these we have remote and inadequate knowledge; but when it is pressed to defend its views concerning this large plurality of infra-human species, it meets objections by saying that we do not know enough to be able to answer them. If the second position were the only theory, I would conclude that neither the ontological nor the epistemological problem about species was soluble, because of this circular interdependence. In contrast, the first position independently establishes ontological criteria in terms of which the epistemological problem can be solved. If its conception of how species are constituted and ordered is right, then the relative inadequacy of our knowledge of essences or properties is irrelevant because of the rule that specifying signs must be related as the essences they are taken to signify: hence, any signs, whether they be properties or contingent accidents, which fail to hierarchize must also fail to specify (Reply Obj. 1 *contra* I). Furthermore, the rightness of the basic ontological conceptions must be argued without any appeal to epistemological considerations. Since it argues in this way, the first position is free from illicit circularity and epistemic evasions.

But it will be said that the first position also gets into epistemic difficulties (Obj. 6 and 7 *contra* I). It is forced to admit its ignorance concerning the nature and properties of inanimate substances. This has one clear significance: the first position cannot hold the theory that we have equally adequate knowledge of all natural species, taking our knowledge of human nature as the standard. But this admission does not mean that the first position must in any way retract or alter its ontological views, for they are independently based. Here there is an important difference between the first and the second position. The former does not attempt to avoid the difficulties, raised by objections (cited above), by confessing ignorance; it recognizes the difficulties as genuine and looks to the day when an improved analysis of inanimate substances will solve them. The latter does attempt to avoid difficulties by making them appear due to our ignorance and, further, it claims such ignorance to be radically incurable. There is not only evasion here, but hopelessness.

There is one other epistemic point on which the first position is superior. Modern exponents of the second position are forced to admit that the determination of species is a matter for the scientist

and not the philosopher.[181] Both in the sphere of life and the sphere of bodies, the naming of species is said to depend on the findings of scientific research. But the second position also insists upon the distinction between natural and systematic species. The latter are, strictly, not species (essences), but races or varieties (accidental classes). It is, therefore, a striking fact that the scientific evidence *appears* inconsistent with the second position, in so far as the findings favor a denial of natural species. The biological evidence tends to show that the diversity of plants and animals is constituted by mutable and accidental classes. The evidence from physics and chemistry tends to show that bodies are ordered in quantitative and qualitative continua, without essential differences. On the other hand, the first position is thoroughly consistent with scientific findings, first because it maintains that the determination of natural species is entirely for the philosopher and not the scientist, and second because it views all scientific classifications as merely accidental divisions within the areas defined by essential distinctions, such as between *plant* and *animal*. It may be said, however, that the scientific evidence is incompatible even with such essential distinctions; but this, as a matter of fact, is not the case. If there is any incompatibility, it is between philosophical analysis and the pseudo-philosophizing of scientists, extrapolating their data, not between philosophical conclusions and scientific facts. These matters will be more fully discussed later.[182]

23. The two positions can be compared in one further respect. The dialectic has indicated the consequences of each position for problems in the philosophy of nature, other than that of species, but related thereto. For either theory of species, there are problems about substantial change; the specification of accidents, especially powers and acts; the difference between the substantial being of living and non-living things, especially the difference between substantial forms which are and are not souls, and the powers they confer; the contingency and mutability of natural kinds, whether essentially or accidentally constituted, and here the "problem of evolution" and the dynamism of nature; the relation of hierarchy and continuity. All of these problems are common to both positions, although, of course, they will be somewhat differently understood

[181] Thus, Gredt, Phillips, Monaco and others. Vd. Part IV, Section 16, *supra*, esp. fn. 163. Cf. also Maritain, *loc. cit.*

[182] In Part VI, Section 25, *infra*, we shall return to the relation of natural philosophy and natural science, in the light of the first position; and show the compatibility of hierarchy and continuity, according to the philosopher and the scientist.

according to each. It is my judgment, however, that the problems are better as problems, i. e. more soluble, according to the first position. I shall try to support this judgment in the remaining part of this article, indicating the solutions and showing their superiority to what the second position would have to say on these matters.[183]

The dialectic has also indicated the relation between the problem of species and the metaphysical question concerning how the essences of composite substances are composed. But on this point we have seen that it is indifferent to the problem of species whether the substantial form be regarded as the principle of the whole specific nature or as the principle merely of the specific difference. The relative merits of the two positions concerning species can not be altered by a decision with respect to this metaphysical question. Nevertheless, a fuller understanding of all that is involved in the truth of the first position may throw light on the metaphysical problem. In fact, the principle of hierarchy, involving as it does the inequality of essences, is itself a metaphysical principle and may, therefore, have some bearing on the metaphysical notion of common matter.

For all the reasons given, I conclude that the first is the better position concerning substantial species, both in the philosophy of nature and in epistemology. For the most part, this superiority has been shown in the dialectic of the issue, although something remains to be shown with regard to other problems mentioned above. But "better" here does not mean "true." The first position has not answered every objection satisfactorily; and on several crucial points, its answers rely upon assumptions which remain to be demonstrated.[184] The judgment of "better" does, however, warrant our attempting a tentative resolution of the problem by a positive construction of the first position.

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(To be continued)

EDITORS' NOTE: We append Dr. Adler's outline of the complete problem and its investigation. Sub-headings 1-17 were covered in preceding issues. The present (Fourth) installment covers sub-headings 18 to 23.

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[183] Vd. Part VI, Section 26, *infra*. Two of the problems, as already noted, will be reserved for subsequent articles, because of their complexity: the problem of substantial change and the problem of the specification of accidents.

[184] These assumptions are with respect to solutions of the problems mentioned in fn. 183, *supra*.

THE PROBLEM OF SPECIES

Outline

I. Introduction

1. The series of articles projected: nature of philosophical *problems*
2. Significance of problems *for Thomists*
3. The limited scope of the first article as dealing with the problem of species: its locus in the philosophy of nature, and its relation to other departments of philosophy
4. Outline of the article in its main divisions.

II. Antecedent Principles

5. Preliminary statement: why these principles must be stated to formulate the problem
6. } Three metaphysical principles, *directly* relevant
7. }
8. }
9. Transition to other principles relevant only *tangentially*
10. Logical and epistemological considerations: their discussion
11. Indicates why a separate section must be devoted to the theory of our knowledge of species.

III. Epistemological Dimension of the Problem

12. Exposition of 4 answers to the question: how many substantial species do we know adequately (by real definitions)?
    a. The position of Rousselot: none
    b. The position of Maritain and Garrigou-Lagrange: one
    c. The position of the decadent scholastics: a very large number
    d. The fourth position: five
13. Dialectical summary of the opposition of these four doctrines, which leads to the discovery that the epistemological issue cannot be resolved at all unless the ontological problem of species can be independently solved.

IV. Exposition of the Problem in the Philosophy of Nature

14. Preliminary statement of the issue as constituted by two positions, i. e., two answers to questions concerning the order and number of substantial species
15. Exposition of the first position
    1. Capital texts from Aristotle and St. Thomas
       a. Texts in re: the order of species
       b. Texts in re: the species of living things
       c. Texts in re: the species of non-living things
    2. Propositional summary and analytical explication of the doctrine contained in these texts
       a. Five propositions concerning the constitution and order of species
       b. Two propositions concerning the number of species
       c. One proposition concerning infra-specific distinctions
    3. Texts from contemporary writers in the tradition of Aristotle and St. Thomas, which *appear* to take this first position

16. Exposition of the second position
    1. Capital texts from Aristotle and St. Thomas
        a. Texts in re: the species of non-living things
        b. Texts in re: the species of living things
        c. Texts in re: the order of species
    2. Propositional summary and analytical explication of the doctrine contained in these texts
    3. Texts from contemporary writers in the tradition of Aristotle and St. Thomas, which *appear* to take this second position
17. Comparison of the two positions
    1. What is common to the two positions
    2. Wherein they differ principally
    3. Why no third position is possible
    4. The dialectical possibilities: either one doctrine is true and the other is false; or some reconciliation of the two is possible by an equivocal use of the word "species."

V. The Dialectic of the Issue

18. Preliminary statement of the dialectical procedure
19. Objections to the second position, with answers so far as possible
20. Objections to the first position, with answers so far as possible
21. Evaluation of the relative merits of the two positions
22. Consideration of the dialectic in relation to the epistemological dimension of the problem
23. Consideration of the dialectic in relation to other problems in metaphysics and the philosophy of nature

VI. The Consequences of a Tentative Resolution of the Problem

24. The tentative character of any resolution
25. Reconciliation of contrary texts with each other and with a resolution favoring the first position
26. Consequences of the resolution in epistemology and logic
27. Consequences of the resolution in the philosophy of nature

VII. Conclusion

28. Determination of the question, Whether the problem is genuine or false; or if genuine, whether a mystery or solvable?
29. Transition to later problems in the series.

BOOK REVIEWS

Cognitive Psychology. By Dom Thomas Verner Moore, Ph. D., M. D. Monk of the Order of St. Benedict. Professor of Psychology, Catholic University of America. Philadelphia: J. B. Lippincott Co., 1939. Pp. viii + 636.

I

It is little more than three quarters of a century since scientific psychology disengaged itself from its philosophic moorings and became an autonomous discipline. G. T. Fechner and Wilhelm Wundt are generally credited with being the creators of our modern science of mind. For Wundt and his disciples, the subject matter of psychology was consciousness; its methods were introspective and analytic; the results of analysis were sensations; and the principle of synthesis was associationism. This state of affairs endured with no important changes until the advent of John B. Watson, whose fulminations against the works and pomps of the introspectionists set a new fashion in psychological debate and resulted in the founding of another school. Now, behavior becomes the subject matter of psychology; its methods are still analytic but without the benefits of introspection; the results of analysis are reflexes; and the principle of synthesis is conditioning. At best, the story of psychology since its foundations as a science, has been one of constant polemic and confusion about the correct things to be studied by the investigator. It would appear that, having lost its soul, its mind, and its consciousness, in that order, modern psychology is now in danger of losing its scientific standing. And all because the psychologists cannot agree upon a common subject matter for analysis! It is at this critical stage in its development that the science of mind can, if it will, learn something from the philosophy of mind.

Psychology represents a unique body of knowledge since its subject matter rightfully belongs to both science and philosophy. If we go back to Aristotle, we find that the subject matter of psychology is soul, including an analysis of its acts, passions, powers and habits. The *De Anima* of the Stagyrite is the first adequate expression of mental philosophy to be found in the writings of the ancients; and it fully justifies the title "father of psychology" which scholars have conferred upon its author. Some improvements have been made upon it, notably those of Thomas Aquinas; but, in the main, the basic doctrines of the *De Anima* have remained unchanged. Note, however, that the Aristotelian soul is not an isolated entity, having no relation to the world of physical dimensions in which it dwells; but a

form of organized matter, that is, a form which in the deepest roots of its nature is designed to inhabit a body. This fact impressed Thomas Aquinas so much that when he came to write his own matured views on psychology, he incorporated them in his *De Homine*. Now, the focal point of analysis becomes man rather than soul. The shift in viewpoint is of capital importance, because it clarifies at once the fundamental issues in psychology by showing that the basic hylomorphic or matter-form nature of man must be recognized from the start if we are to pursue our scientific investigations or philosophic analyses of human acts, powers and habits with correct perspective and understanding. If we wish to indicate the change of attitude in a word, I believe we can do so by saying that Aristotle's approach to the philosophy of mind is animistic or psychological; Aquinas's is synolistic or anthropological [σύνολον: the whole together]. There is no inherent opposition here between the two positions since both regard the soul as the form of the body, and study it precisely under these hylomorphic conditions.

For the Thomist, then, the proper subject matter of psychology is human nature or man. Now, man is phenomenally represented to scientists and philosophers alike by his acts, powers and habits; which means that these acts, powers and habits form the proper field of study for both the science and the philosophy of mind: with this difference, of course, that whereas the analyses of science are confined to the phenomenal area, those of philosophy plunge beneath the veil of human appearances in order to exhibit the noumenal core of man's being. It is not without significance that, in certain scientific quarters today, something very much like a synolistic attitude towards the subject matter of psychology may be observed. In practice, at any rate, the research programmes of the gestaltists, the psychodiagnosticians, and the factorial psychologists operate upon a basis of whole-making or anthropological approach to man which Aquinas initiated. Out of a wealth of data supplied by these three groups of investigators, plus a set of philosophic principles that are fundamentally Aristotelian in character, Dr. Moore has constructed his new book *Cognitive Psychology*.

II

As its title indicates, *Cognitive Psychology* deals with the acts, powers and habits of man involved in the acquisition of knowledge. Like Aristotle and Thomas Aquinas, Dr. Moore is hylomorphist; but unlike Aquinas, hylomorphism comes last rather than first in the exposition of his psychological material. This is unfortunate, I think, because it so often involves truncated and inadequate references to such critical notions as man, mind, substance, ego and person—notions that should be made abundantly clear to the student from the outset. Sometimes the basic implications of the

hylomorphic doctrine, so carefully and exactly defined by the followers of Aristotle and Aquinas, have not, it seems, been fully grasped by Dr. Moore. Thus: " One cannot account for the facts of consciousness without a psyche, that is to say, a unit being that is conscious." [pp. 3-4] But a psyche is a soul, and a soul is not a unit being, but only part of the total entity that is man. Again: " That which experiences and adjusts is the psyche." [p. 4] But, *that which* experiences and adjusts is the man [*principium quod*]. We may very correctly say, however, that *that by which* man experiences and adjusts is his psyche [*principium quo*]; but of this distinction there is no record in Dr. Moore's book. Further: " Logically we conceive of the soul as distinct from the organism that it vivifies, though actually they are not two substances, but only one." [p. 583] This is a very poor statement of an important philosophic proposition; yet no clarification is found either here or any place where the matter is mentioned [e. g., p. 295] of the distinction of incomplete substances. It is true that the soul of man is an incomplete substance, in the sense that it is not, of itself, a species; but it is also true that the human spirit has an autonimity of its own in the sense that it can and does exist apart from the body. How do we think of it, surviving after its separation from matter, except as a substance? In the only place where Dr. Moore speaks of the soul as an immortal substance [p. 89] his argument for survival rests, not on the subsistent character of man's form, but on the law of conservation of matter! This is all the more a pity when he already possesses within his text a superlative array of positive evidences which could have formed a point of departure for the metaphysical argument.

III

It would help a great deal towards a settlement of psychology's muddled issues if the scientists should give commonly-accepted meanings to all their terms. Verbal obscuration has been a prolific source of disagreement among the investigators, even since the birth of psychology as a science. The Aristotelian philosophy of mind, on the other hand, has been relatively undisturbed by linguistic arguments of this sort, chiefly for the reason that it has had ample time to weigh the significance of its terms and to give them a fixed and uniform usage. Hylomorphism means exactly the same thing today that it did for Aristotle and Aquinas. The basic analysis of man still pictures him, in the Aristotelico-Thomistic ideology, as a creature composed of body and soul. The body is the somatic part of his nature; the soul is the psychic. The union of body and soul is therefore a psycho-somatic and substantial one. Further, man's nature is endowed with powers that enable him to operate. Some of his powers are rooted in the soul alone; and these are purely psychic. Others are rooted in the composite; and these

are psychosomatic. Of the latter, some are shared with the plant kingdom; and these are the vegetable powers. Others are shared with the animal kingdom; and these are the sensory powers. In the hylomorphic analysis, the psyche is the soul of the organism. The term " organic " refers, therefore, to the fact that the bodies of plants, animals and men are besouled. Unfortunately, some of this Aristotelian nomenclature was absorbed into the language of post-Cartesian science, with profound alterations in the original significance of terms. The word " organic," for example, for most scientists todays means simply a high degree of mechanical arrangement. Certainly it has no relation to the Aristotelian concept of besouled matter.

By profession, Dom Moore is a scientist rather than a philosopher; and this may account for the fact that his terminology does not always correspond with the rigorous Aristotelian and Thomistic use of words. The vocabulary of hylomorphism, of course, is open to improvement like any other artifact of the human mind; still, one cannot ascend from the laboratory to the ivory tower and expect to find that every new word which science has coined will be acceptable to the philosopher who dwells there. Thus: " psychobiological " [p. 5] is a cumbersome and tautological term, since both its root elements indicate the presence of the soul. Again: " organogenic " [caused by a physical condition of the organism] does not properly contrast with " psychogenic " [p. 290, p. 389] " Somatogenic " would be a better term from the hylomorphic point of view. Further: " mechanical workings of the mind " [p. 521] to an Aristotelian is simply a contradiction in terms. Again: " ego " is not identical with the " psyche " [p. 529]; and neither is " psyche " the same as " unit being " [p. 31] as we have already pointed out. Further, the hylomorphist eschews the practice of referring to the cognitive achievements of animals as " intelligence " [p. 468] or " insight " [p. 469], though he may condone such a practice among the non-hylomorphists on the grounds of inadequacy of analysis. Finally: " person " is not " a living, conscious, thinking substance " [p. 44]—unless one is taking a Cartesian view of it—but an individual substance of a rational nature. Whether man is conscious or not, whether he thinks or not, adds nothing to and subtracts nothing from his stature as a person. To be sure, these disagreements in the use of terms are not of a serious nature, and for the most part are unintentional; yet, to be a thorough-going hylomorphist, one must employ the words, as well as the concepts, of the system.

IV

In the Thomistic economy of knowledge, several powers are involved: the external senses; central sense, imagination, the cogitative power, and memory; and finally, active and passive intellect. Of most of these powers,

Dr. Moore has given a good account; but particularly, central sense and memory have been examined with an abundance of scientific detail and inductive analysis. The term " perception " is employed by Dom Moore to cover the entire cognitive procedure in man: from the stimulation of his sense organs to the final elaboration of his highest concepts, judgments, and inferences. This meaning is rather unusual among modern psychologists, who, for the most part, confine the perceptual process within the dimensions of sense knowledge. Aquinas himself frequently uses the term in this modern significance; and indeed, with most of the Aristotelian psychologists, perceptual processes are contrasted with conceptual processes, in the same way that sense knowledge is contrasted with intellectual knowledge.

Briefly, the theory of perception which Dr. Moore develops involves two main elements: first, the synthesis of present sensations with past experience; second, the interpretation of the whole mental content thus achieved. The exposition is satisfactory as far as it goes; but it does not represent an adequate Thomistic analysis of the cognitive procedure, particularly in its sensory aspect. Thus, while the work of central sense and memory is extremely well portrayed, the part played by imagination and the cogitative power is scarcely touched upon at all. In fact, it is difficult to determine whether Dr. Moore follows the doctrine of Aquinas in his fourfold division of the internal sensoria. Despite these inadequacies, however, there are two basic insights that emerge from the discussion of the prolegomena to intellection: first, the analysis of phantasm as a unitary complex, formed by central sense from present sensory data that have been modified by previous experience; second, the discovery of the Aristotelian motifs that lurk in the modern gestalt theory of perception.

V

According to Dr. Moore, memorial power is distinguished by a twofold function: the storing of experience; and its recall. [p. 413] But by such criteria, as Aquinas tells us, it is impossible to distinguish memory from imagination which has identically the same functions. We must add, therefore, a third element in order to differentiate between the two powers; and this new specific character is found in memory's ability to identify the facts of recall as past or to put them in a definite historical context. Although, properly speaking, memory is a psychosomatic power, that is, a power of the composite, it is rather dangerous to describe it as " a function of the organism " [p. 409], especially in view of the mechanical associations that the term " organism " has for most of our modern investigators. On the other hand, it is just as misleading to speak of " sensory and intellectual memory " [p. 462 ff.] as though each were an autonomous power, specified

by its own proper object. True, intellect has the ability to store and recall ideas, just as sense memory has the ability to store and recall images. But intellect has no preterite object, as such, since its ideas transcend all temporal and spatial limitations; and it cannot, therefore, be specified as a separate power. Sense memory, on the contrary, is different from all our other abilities precisely because it identifies its object as past.

VI

The analysis of intellect and its cognitive procedures is, perhaps, the least satisfactory part of Dom Moore's text from the philosophic point of view. The treatment is full of repetitious statements that do not clarify, and of accidental descriptions that are made to do the work of essential definition. Thus: " the intellect actively interpreting sensory presentations was termed in the Middle Age scholastic philosophy the *intellectus agens*." [p. 329] But the function of active intellect is not to interpret, but to abstract. Active interpretation is essentially a task of passive intellect. Again: " The mind as a storehouse of intellectual experience came to be known in the Middle Age scholastic philosophy as the passive intellect." [p. 328] But thesauric functions are merely secondary features of passive intellect, whose first and essential work is to understand. Further: " The intellectual activity which dips down into the unconscious and renders a definition conscious . . . is the *intellectus agens*." [p. 125] This is a complete misunderstanding of the Aristotelian doctrine, since active intellect really has nothing to do whatever with the framing of conscious definitions. On the contrary, its essential abstractive functions are unconscious. Continuing in the same passage [p. 125] Dom Moore adds: " This activity is expressed in St. Thomas in the short sentence: the intellectus agens makes the phantasmata received from the senses . . . consciously understood by means of a certain abstraction." But Aquinas says nothing of the sort. If we consult the quotation to which Dr. Moore refers, we find it very clearly stated that the task of active intellect is simply to make the phantasms *capable of being understood* [" *intelligibilia in actu* "]. As we have already remarked, actual understanding is the office of passive intellect. The Thomistic ideogenesis itself is no easy thing to grasp and requires care and skill of expression if its terms are to be made intelligible to the student's mind. How much, I wonder, will the reader understand of the following summary of the ideogenetic process: " The ego beholds the sensory presentation, and the *intellectus agens* awakens the intellectual categories in the τόπος εἰδῶν " [p. 329]; or this: " The organizing of the unformed mass of sensory experience by a concept derived from the τόπος εἰδῶν the passive intellect, is the activity of the *intellectus agens* illuminating the phantasm of perception in the process of interpreting a sensory impression." [p. 330]

VII

Strictly speaking, the final product of passive intellect, the *species intelligibilis expressa* or concept, is neither " a conscious awareness of a definition " [p. 118] nor " an interpretation of the data of experience " [p. 125], but a medium or instrument by which man defines and interprets things. Every writer realizes the difficulty of giving an accurate translation to the highly technical *species intelligibilis* of Aquinas. Perhaps the best achievement in any modern language is the " cognitional determinant " of Mercier. But any rendering of the phrase is inadequate unless it retains the basic notion of *species intelligibilis* as something that is *capable of being understood.* For obviously, if the term means anything, it signifies that the concept is really not the final act of understanding, but simply the final product which determines or impels the mind of man to understand. In view of this important distinction, I cannot see that Dr. Moore has shed any light on the meaning of the critical *species* by turning it into English as an " intellectual category of experience." [p. 328] Maritain's " presentative form," though perhaps not quite so good as Mercier's " cognitional determinant," is still a closer approximation to the signatory and instrumental meaning of the term. One excellent service, however, which Dom Moore has done for the psychology of ideation is to show the utter impossibility, even from the experimental point of view, of identifying palpable images with impalpable concepts.

In the field of factorial analysis, Dr. Moore displays a masterly control over the statistics of Spearman and his school. Perhaps it is his very nearness to the operational data of the factor psychologists which makes him at times identify acts and powers. Thus [p. 604], the psychic faculties of man are not " thought and will," but intellect and will; and his psychosomatic faculties are not " sensation and affective experience," but the senses and appetites—plus, of course, the powers of local movement and vegetation. Again: the " faculties " of man are not " activities " [p. 589] but dispositions to act; just as the " habits " of man are not " abilities " [p. 581] but qualities produced in the powers, disposing them to act with promptness and uniformity, with ease and pleasure.

VIII

Dr. Moore closes his text with the observation that the further development of scientific theory must wait upon " a much needed advance in the philosophy of mind " [p. 605]. But all the basic principles for a philosophic analysis of man and his powers were clearly formulated by Aristotle. Perhaps Dom Moore does not quite understand, as yet, the relations that obtain between the science and the philosophy of mind. Just as Aristotle, once and for all, separated philosophic knowledge from superstition, and Aquinas established the autonomy of reason against faith, so the modern

schoolman has correctly insisted on the basic distinction of science from philosophy. Dr. Moore nowhere discusses this distinction, though it is one of capital import for psychology. In an early chapter of his book [p. 177] he mentions the necessity of "special qualifications" which a philosopher must have before he can properly handle a problem like perception. By special qualifications he means a scientific training. But science is not a necessary preliminary to philosophy, though it may be helpful. Philosophy is grounded on public experience, and does not require the refinements of analysis yielded by the tools, training, and technique of science, in order to build its metaphysical superstructure. Science progresses by a transition to new and better knowledge, often discarding the old as false or unsatisfactory. Philosophy, on the other hand, progresses by a richer and deeper understanding of principles that are already known. The basic propositions of philosophic psychology are not founded on the special experience of the scientist, but on common observation; which means that they can be neither established nor refuted by appeal to the laws of science. But since psychology is simultaneously a branch of science and a branch of philosophy, there is the immediate possibility of uniting both its scientific and its philosophic analyses in one continous doctrine in which philosophy will answer the fundamental questions about the nature of man as a creature composed of body and soul, and science will resolve in detail the phenomenal character of his acts, powers and habits.

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The Theology of Prayer. By JOSEPH CLIFFORD FENTON. Milwaukee: Bruce Publishing Company, 1939. Pp. 257, with index. $2.25.

The author's purpose in this work, as expressed by himself, is "to bring to the readers of the English language what the great scholastic theologians have taught about the nature of Christian prayer" (p. vii). He says, very truly, that there is an abundance of literature in English on prayer, but all of a type which presupposes the fundamental approach his treatment of the subject is intended to comprise. Existing works are, as Doctor Fenton observes, concerned with methods of prayer, or with the characteristics of the various stages of mental prayer, or with exhortation to prayer. His own object will be to expose the teaching of Saint Thomas and to explain it in the light of The Angelic Doctor's commentators who are, for this subject, principally Sylvius, Vallgornera, and Joseph a Spiritu Sancto. That with which Saint Thomas and his commentators were concerned "was the statement of what God has revealed about prayer and what the Catholic Church proposes as having been revealed by God" (p. vii).

On the whole, Doctor Fenton succeeds very well in placing before the public a readable yet scientific volume whose need has long been felt and whose importance it is difficult to over-emphasize. There is, perhaps, no subject in the whole field of theology in which it is more dangerous to neglect, to gloss over, or even to presuppose the fundamentals than in that of prayer. Doctor Fenton's work is concerned solely with fundamentals. In twenty-three chapters he clarifies the definition of prayer, determines the nature of its activity, manifests its necessity and fitness, assigns it to its proper virtue, points out its objects—*cui, quod,* and *pro quo,* indicates the model prayer, designates the subjects of prayer, specifies the qualities and the conditions of efficacious prayer, and in a drastic attempt at unification which ends, this reviewer thinks, in an inaccurate oversimplification reduces meditation and contemplation to prayer.

Lest a subsequent criticism principally of what is contained in the last two chapters might seem to refer to the book as a whole, it is here insisted upon that the author's treatment of the fundamentals of prayer is in general excellent and most timely. Two minor points of criticism, exclusive of that which is to be directed against the conclusions of chapters twenty-two and twenty-three, may be proposed. The arguments which Doctor Fenton advances in chapter three to establish prayer's activity as a cause would be just as effective as proof of the thesis that prayer is merely a necessary condition for the obtaining of various favors. There seems, too, to be a tendency to belabor the question of the fact and the possibility of prayer on the part of the souls in Purgatory in behalf of members of the Church militant.

As has been indicated, the last two chapters on the nature of meditation and contemplation are, to the mind of this reviewer, unfortunate. Dr. Fenton attempts to reduce both meditation and contemplation to prayer, " oratio," in its essential meaning, i. e., as the petition of fitting things from God. Perhaps it is more accurate to quote the author as saying that they are in the line of the prayer of petition; he wishes to show " that mental prayer, in all its degrees, and in its full complexity and perfection is actually a part of the petition of fitting things from God in which prayer itself essentially consists " (p. 242).

There is here a fundamental confusion due to the ambiguous use of the word " prayer." A glance through the writings of St. Thomas shows us that he never falls into this confusion. True he does use the word " oratio " in two senses. Most frequently it is used in the sense of the petition of fitting things from God. However, when he speaks of the parts of prayer (oratio) he uses it in another sense, for he says that the parts are: obsecration, oration, postulation, and thanksgiving. (II-II, q. 83, a. 17) Here " oration " signifies the ascent of the mind to God, " postulation," the actual petition. Because the ascent of the mind may be perfected by meditation and con-

templation, Dr. Fenton concludes that they are reducible to " oratio " in the sense of petition. Meditation and contemplation on the other hand are essentially loving acts of union with God proceeding from faith and charity, and, more perfectly, from the gifts of the Holy Ghost. The relation of " oratio " to contemplation, for example is clear: in the *Summa Theologica* (II-II, q. 180, a. 4) St. Thomas says that " contemplation regards the simple act of gazing on the truth." In the reply to the fourth objection he explains the relation of " oratio " and meditation to contemplation. " Man reaches the knowledge of truth in two ways. First, by means of things received from another. In this way, as regards the thing he receives from God, he needs prayer (oratio) . . . . Secondly, he needs to apply himself by his personal study, and thus he requires meditation." " Oratio " is not an essential part of meditation or contemplation, but a necessary prerequisite to obtain God's grace for progress in meditation and contemplation. In other words, petition is ordained to meditation and contemplation, not vice versa. We can readily admit that the more perfect the meditation and contemplation become, the more perfect the petitions that arise to God, and the more fervent is the devotion of the soul. But petition and devotion are the means, meditation and contemplation the end.

This is not a merely academic question. Certainly " an inadequate notion of meditation is a serious handicap to the man who wishes to practice meditation " (p. 217). We feel, however, that to say: " The end of meditation is practical," is to give an inadequate notion of it. Meditation is an exercise of faith and love, seeking union with God. The perfection of meditation is what modern spiritual writers call " acquired contemplation " and what St. John of the Cross describes as the prayer of faith. Dr. Fenton admits that infused contemplation is an act of faith and charity, under the inspiration of the Gifts of the Holy Ghost, of which the most perfect is the Gift of Wisdom. Now St. Thomas insists continually that both faith and the Gift of Wisdom are primarily speculative, practical *by extension*. This gives us the key to a solution.

The ultimate end of man is eternal life, the intuitive vision of God by the intellect, the ineffable transports of love inspired by this vision. Herein lies the *perfect union* of the soul with God. But there is possible in this life an *imperfect union* of the soul with God through meditation and especially, infused contemplation. Its continued increase is the proximate end of all our spiritual activity. The cultivation of the moral virtues, devotion, the prayer of petition are means to the end of this union. In a sense meditation is also a means; but strictly it is the imperfect exercise of this union. The beginner in the spiritual life must not be ignorant of this precious truth. Undoubtedly, in the purgative way meditation must be devoted to practical ends, but only by extension; the exercise of meditation as union depends upon the practice of the moral virtues, and hence, just as

faith, and even the infused Gift of Wisdom, meditation must at times devote itself to practical regulation of the moral life. Moreover, it is true that the closer the union of the soul to God, the greater its devotion, the more powerfully motivated its petition. But what does it petition? A closer union in this life, perfect union in the next. In a word, petition is not the only attitude of the soul in the presence of God. Today, when many of the faithful are seeking a deeper appreciation of Christian spirituality, we must insist that meditation, "the prayer of faith," as St. John of the Cross calls it, is the most perfect means at our disposal for loving union with God, wherein we may find a foretaste of the joys of heaven.

It would, perhaps, be unfair to say that Doctor Fenton does not subscribe to this explanation of the relationships between meditation and contemplation and prayer. The fault which this reviewer would find with the last two chapters of his work is rather one of improper emphasis than of positive error. There is an over-insistence upon the practicality of meditation and contemplation and an under-emphasis upon their finality *in se*—an under-emphasis, indeed, which amounts almost to complete neglect.

No attempt to unify the doctrine of theologians on prayer must lose sight even for a moment of this essential *inwardness* of the acts of meditation and contemplation. If union with God even in its most imperfect stage, not to mention the union effected by infused contemplation, is not desirable for its own sake what is there that can be? What happens to the essential distinction between the speculative and the practical? And what of the beatific vision itself which for the great mystics is so short a step from that union with God which they enjoy here on earth?

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The Analysis of Objects. By AUGUSTINE J. OSGNIACH, O.S.B., M.A., Ph.D. New York: Joseph F. Wagner, Inc., 1938. Pp. xvii + 302.

St. Thomas excelled in writing prefaces. His classic one is the *Prologus* in the *Summa Theologica.* By it he forever endeared himself to theological students—the *incipientes* or *novitii hujus doctrinae.* There is another of his "introductions" however which should be equally treasured, namely, his *Proemium* to the *Commentarium in XII Libros Metaphysicorum.* It is an *apologia* for the primacy of Metaphysics, a kind of charter of Wisdom, a Magna Carta of First Philosophy. In comparatively few words and with his usual limpid latinity the Angelic Doctor delivers his brief for Metaphysics. He justifies its unique position with respect to the arts and other sciences and vindicates its right to its various titles, even to that exalted one—*Scientia Divina.*

St. Thomas's attitude toward Metaphysics, which attitude he indeed shared with all the great followers of the *philosophia perennis* in the past, is not without its defenders today. These are not only the lineal descendants, so to speak, of the Schoolmen, but others too, as Adler and Hutchins. One who has been indefatigable by word and pen in this contemporary "philosophical crusade to recover the Holy Land of Metaphysics," as he calls it (p. vii), is the Right Rev. Msgr. Fulton J. Sheen, who writes the short stirring foreword to the present work. Msgr. Sheen reasserts in his inimitable style the traditional view and invites all modern philosophers to its investigation.

Dr. Augustine J. Osgniach, professor of philosophy at St. John's University, Collegeville, Minnesota, is likewise concerned to reestablish Metaphysics in its rightful place and in this volume does his share toward that end. He is convinced, he tells us in his preface, that the modern non-Scholastic aloofness to this science "is not one of indifference or aversion to truth. The modern mind is now more than ever desperately engaged in the pursuit of truth, and would eagerly accept and embrace it if Scholasticism were divested of its antiquated garments and exhibited under the attractiveness of a more modern garb" (p. ix). Acknowledging the work that has already been done in this field, he explains that his own task will be a detailed exposition "of the four principle categories after the teaching of the Schoolmen" (p. ix), i. e., substance, quantity, relation, and quality. By "Schoolmen," he adds, is meant the great masters of the Golden Era of Scholasticism, and especially St. Thomas Aquinas.

His book bears the sub-title "The Four Principle Categories," and is described as "An Historico-Critical Analysis in the Light of Scholastic Philosophy." The matter is divided into eleven chapters. Chapters I-III treat of the categories in general: the historical aspect of the problem of the categories; their derivation; their natures. The next two chapters (IV and V) deal with the category of substance: its objectivity and precise definition; its division. In speaking of the kinds of substance he discusses Physical Dualism, i. e. Hylemorphism; the principle of individuation; the meanings of subsistance, nature, supposit, person. The following chapter (VI) is an elucidation of the notion of accident in general and takes into account particularly the Cartesian attack on the objectivity of accidents as well as certain modern views on accident. Chapter VII is an historico-critical analysis of the concept of substance. Three epochs are distinguished for discussion: from Scotus to Descartes; from Descartes to Kant; and from Kant to our time. In consideration of the particular accidents, the author proceeds to explain first the category of quantity (Chapter VIII): its position relative to the other supreme genera; its essence, division, and fundamental characteristics. He allots two chapters (IX and X) to the category of relation: one, to the establishment of its nature and its right

to be numbered among the categories; the other, to the intelligibility of relation, in which monistic and monadistic views along with those of Taylor and Bradley are weighed. The last chapter (XI) completes the treatise with an exposition of quality. Quality is contrasted with quantity and relation, is justified as a category, is defined precisely, and finally divided into its species. In the "Conclusion" which is extremely brief, the remaining six categories are distinguished. A bibliography, a glossary of technical terms, and an index are appended.

In his preface Dr. Osgniach maintains that the being which is the source of his division of the categories is

> real, finite, contingent and actual. The addition of the term *actual* to the other characteristics of being sets us in opposition to some Scholastics, who would include potential being in the scheme (p. xi).

His position is elaborated in various places in the text itself:

> Aquinas has often noted that there are three distinct acceptions of this term. At times, being denotes the logical truth expressed by the copulative verb in judgment—as, for instance, when we say: "Socrates is a philosopher." . . . Again, being may denote the essence or quiddity of a thing, namely, that which makes a thing to be what it is and distinguishes it from all others by placing it in its proper species—as, for instance, humanity in Socrates, because through humanity Socrates is a man. Finally, the term being may signify the actual existence of a thing, namely, that by which a thing is actually constituted in nature, and whatever is in nature is an actually complete existent.
>
> It must be borne in mind, then, that the term "being" accepted in the third sense connotes a complete and concrete entity. Such a being obviously is more perfect than being connoting essence, since it embraces not only essence but also the realization of that essence; in other words, because it connotes an essence completed through existence. It is also more complete than the being expressive of the logical nexus, because the latter is also applicable to things deprived of essence (as, for instance, to blindness or any other privation) (pp. 15-16).
>
> At this point the doctrines of Aquinas and his followers may be defended. According to them, being which is divided into ten categories is neither the one denoting the logical nexus in judgment nor the one indicating essence or quiddity, but the one signifying the actual existence of things (p. 18).
>
> . . . By categories, St. Thomas says, it is not asked primarily whether a thing is (*an sit res*), but what the nature and properties of the thing are. But, the being which expresses the logical nexus in a proposition does not answer the second question.
>
> The same Doctor continues: "Being may be taken in two meanings. First, according as it denotes existence of a thing, inasmuch as it is divided into the ten categories and has objective reference. Being, taken in the second sense, is logical and consists in the propositional nexus expressed by the copulative verb *is*; being thus accepted answers the question *whether a thing is*, and it is neither converted into objective reality nor divided into the ten predicaments" (*Sum. Theol.*, I, q. 48, a. 2, ad 2.) (pp. 19-20).

An additional argument may be advanced here to corroborate the Scholastic contention that the source of the categories is an actual existent. Whatever is apprehended by our mind is apprehended first under the general notion of being. For, before we know what a real existent is, we must know that it is. Passing from this stage of knowledge of mere acquaintance, the mind goes on to compare and enumerate the common modes by which being is determined; these common modes of predication are called categories. Thus, Scholastics have enumerated as many categories as there are modes of existence. Now, if this be the true origin of categories, it is obvious that the source of the categories is actual being.

The being which is determined by the predicaments, according to Aquinas, is neither the being of the logical nexus nor the being of abstract essences but the actual existent. The diversity of categories, then, arises from the various modes by which they represent actual being (p. 26).

. . . As previously noted, two aspects must be distinguished in actual being, namely, essence and existence. These two are distinct in every contingent being. Such being the case, it logically follows that categories must consist of two elements, namely, essence and existence.

According to this view, essence in its widest acceptation is the *material* element; its existential mode is the *formal* element of the categories. Essences do not differ, absolutely considered, among themselves; for the notion of essence, considered in an absolute sense as something undetermined and capable of assuming existence, is simple and one. Therefore, essences cannot differ in any other way than according to the diverse mode of existence whereby the mind perceives them to be determined. Since the material element of any being is that which it has in common with other things, and the formal element is that which distinguishes it from others, we may conclude that essence in its widest meaning constitutes the matter and existence the form of the categories.

To make this point clear, it will be helpful to use the example of substance and accident into which categorical being is divided. Essence is the material element both in the category of substance and in the category of accident, because it is intrinsic to both to have essence. Existence, however, is the formal element because the essence of substance is determined through the mode of existence which is not in another, and because the essence of accident is determined through the mode of existence which is in another. Hence it appears, first, that in categories there is a twofold element, namely, essence and existence; secondly, that categories do not differ according to their essences absolutely considered, but according to their essences determined by diverse modes of existence. . . .

How does one category differ from another? We have already seen that each category is composed of essence and existence. Now, an existent is distinguished from another existent through the formal element which places it into its proper species. But this formal element is existence, because the essence through its actualization in reality is constituted into a special category. Therefore categories are distinguished from each other in so far as their modes of existence differ (pp. 28-29-30).

In regard to all this the following may be noted: 1. While it is true that

the division of being into categories starts with real and actual being inasmuch as the metaphysician obtains his knowledge of all being from that which actually exists, and inasmuch as he is especially concerned with the understanding of that which actually is, nevertheless the being which he divides into the categories does not exclude *possible* being. If this were true, that special part of Metaphysics which treats of created being would not *necessarily* be valid beyond the present or actually existing things.

2. There is no need to bring in the real distinction between essence and existence in the derivation of the categories. This distinction is necessary to manifest the *possibility* of the creature. He who divides being into the categories, however, does not begin his procedure at that step, but takes the creature as *given,* and therefore possible, and proceeds to his task. That this is the true method is further corroborated by the fact that the great masters of the *philosophia perennis,* as far as this reviewer is aware, did not deem it necessary to bring in the essence and existence distinction and did not actually make use of it in discussing the derivation of the categories.

3. Further, existence is of itself undetermined and limitless. It is *second* act, *ultimate* act. It is determined, limited, specified by essence, which is *first* act. To hold therefore that essences do not differ among themselves and that they are something undetermined seems to reverse the rôles of essence and existence.

4. Dr. Osgniach himself again and again subscribes to the classical formula, in describing substance as " an essence or thing to the nature of which it is *due* that it should not exist in another " (cf., e. g. pp. 37, 38, 39, 40, 158, 161, 165, 166). He likewise grants that it " is not of the essence of accident that it should actually inhere in the subject, but only that it should have an aptitude or exigence for inherence " (p. 76; cf. also p. 38).

5. Finally, St. Thomas' position, as indicated by the author (i. e. the first part of the above citation from page 19—for which no reference is given) is obviously opposed to his own. Moreover the direct quotation from the *Summa* (I, q. 48, a. 2, ad 2) is not only translated quite freely but even erroneously. St. Thomas does not say: " First, according as it denotes existence of a thing . . ." but " Uno modo, secundum quod significat *entitatem* rei. . . ."

The incorrect description of prime matter as

> . . . an incomplete and absolutely indeterminate principle common to all bodies, *which extends their substance into parts outside parts,* and which is capable of receiving successively different determinations (p. 58) (italics mine)

is immediately challenged when Dr. Osgniach himself goes on to say that

Aristotle described it negatively as follows: it is not anything complete in itself, it is not quantity, nor is it quality, nor is it any of those things which determine the nature of a being, of itself it is nothing, can do nothing; it has no essence, no existence, no independence.

Although he has clearly stated the position of Suarez regarding prime matter, and, if not in so many words, at least equivalently, has rejected it for that of St. Thomas (pp. 90-95) he says on page 177

Although substantial form (being the source of qualities) is nobler than prime matter (whose basic property is quantity), in the order of nature the latter is prior to the former. Matter must exist before the form is added to it, nor can it be conceived how, in the generation of things, a form could precede matter.

The difficulty of the respective priority, in the order of nature, is clarified by the application of that most valuable principle *Causae ad invicem sunt causae* (cf. *Angelicum,* Fasc. 1, 1932, pp. 21 et seq.).

Dr. Osgniach's discussion of the principle of individuation (pp. 70-73) is not as clear as could be desired. A praiseworthy intent to be brief probably is the source of the obscurity. This profound problem however is not easily susceptible of a satisfactory, short treatment.

It is not true, as it is said on page 272, that the active and passive intellect are identified. Distinct faculties must be admitted wherever there is an essential diversity in the manner of activity. The operation however of the passive intellect is immanent, while that of the active intellect is transient, in the strict sense of these words.

In general, greater care should have been exercised in the final preparation of the manuscript. This would have meant the inclusion of more references; it would have avoided such imperfections as inaccurate or incomplete references (e. g., pp. 63, 238), the putting of " into " for " from " in the description of logical accident (p. 75), the interchanging of the Latin and French forms of Goudin's name (cf. 178, 285, 299).

Finally, lest some take Dr. Osgniach's statement about the divesting of Scholasticism " of its antiquated garments " in a sense which he himself would repudiate, a word on the importance of retaining scholastic terminology is not out of place. This terminology is the fruit of the accumulative labor of centuries. The technical terms in the nomenclature of Scholasticism are unrivalled for their clearness and succinctness. Until some better substitute is found and proved, we should cherish them as a precious heritage and jealously guard them as a treasure of great value.

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BRIEF NOTICES

Which Way, Democracy? By Wilfrid Parsons, S.J. New York: The Macmillan Co., 1939. Pp. vii + 295. $2.00.

By an examination of the fundamental dependence of democracy on religious principles (though the argument has its force from moral rather than religious principles), Father Parsons has shown the basic defects of modern government and the basic remedies for the ills of democracy. He proceeds by pointing out the gradual elimination of Christian influence from government, the inevitable decay of Liberalism and the present desperate state of democracy. The constructive side of the book is a statement of the Christian concept of the state, the nature of freedom and the tradition behind democratic government. Some particular problems are then treated: the threats to democracy, industrial, racial, and international justice.

Oeuvres de Saint Augustin. (Bibliothèque Augustinienne) Paris: Desclée de Brouwer.

It is with the greatest pleasure that we welcome this new project in the field of Catholic thought. Under the general editorship of Père Fulbert Cayré, A.A., outstanding French scholars are undertaking a complete edition of the works of St. Augustine, with the original text, a translation, and notes. The tremendous literary output of the saint has been divided into ten series; the first series includes the "opuscula," or shorter works of the saint, and will extend through twelve volumes. Three of these have already appeared. I. *La Morale Chrétienne.* By B. Roland-Gosselin. 1936. Pp. 252. 15 fr. II. *Problèmes Moraux.* By Gustave Combes. 1937. Pp. 570. 25 fr. III. *L'Ascétisme Chrétien.* By J. Saint-Martin. 1939. Pp. 568. 25 fr. This third volume also contains a general introduction to the whole edition by F. Cayré and F. Van Steenberghen. The most important criticism of this undertaking has already been met by the editors. In the first two volumes many passages were omitted from the Latin text, because they were digressions from the main argument. The editors have now determined to publish the integral text of each work. The portions omitted in the first two volumes have been supplied in two small paper-bound appendices. Especially gratifying is the compact size of each volume. The third volume also possesses an index.

Études et Recherches III. Publiées par le Collège Dominicain d'Ottawa. *Philosophie:* Cahier II. Ottawa: Les Éditions du Lévrier, 1938. Pp. 251, with index.

The third volume of *Études et Recherches* contains the following articles: "Pensée et identification selon Émile Meyerson," by H.-D. Gardeil; "La

base d'une Philosophie introspective: le Fait Primitif selon Maine de Biran," by A.-M. Monette; " Les parties potentielles de l'intellect chez S. Albert le Grand," by A.-M. Éthier. There is an extended study by L.-M. Régis on the critical problem: " La critique néothomiste est-elle thomiste? " The volume closes with a long review by M.-M. Desmarais of Roland Dalbiez' *Le méthode psychanalytique et la Doctrine freudienne.*

Traité de Philosophie. I Logique—Cosmologie. By Régis Jolivet. Paris: Emmanuel Vite, 1939.

This is the first of a four volume work on philosophy. It is a text-book, but as might be expected from such an author as M. Jolivet, an exceptional text-book. For it is based on the conviction that philosophy is an attempt to solve problems and that even a tyro in philosophy should be led to appreciate what the problems of philosophy are. A seemingly disproportionate part of the present volume is devoted to the question of methodology, especially, of mathematics, natural science, and moral science.

Publications in Medieval Studies. The University of Notre Dame. Editor: Philip S. Moore, C. S. C.

These works are a definite sign that the interest of American scholars has been aroused to the historical aspects of the Middle Ages. Each manuscript unearthed in some obscure library and published in book form is an added light cast upon the tremendous intellectual activity of the scholastics. The University of Notre Dame, the editor, and the scholars working with him are to be congratulated on the results of their work so far. I. *The Works of Peter of Poitiers.* By Philip S. Moore, C. S. C. 1936. Pp. ix + 218, with index. II. *Commentarius Cantabrigiensis in Epistolas Pauli e schola Petri Abaelardi:* 1. *In Epistolam ad Romanos.* 2. *In Epistolam ad Corinthios Iam et IIam, ad Galatos et ad Ephesios.* By Artur Langraf. 1937, 1939. Pp. xlii + 223 + 446, with indices. III. *Petri Pictaviensis Allegoriae super Tabernaculum Moysi.* By Philip S. Moore and James A. Corbett. 1938. Pp. xxiii + 214. Much more is promised, for which we shall wait with expectation.

Het Domein der Godsdienst-Psychologie. By Prof. Dr. F. J. Rutten. Nijmegen: N. V. Centrale Drukkerij. Pp. 51.

Dr. Rutten, professor of empirical psychology at the Catholic University of Nijmegen, in this little booklet, defines the task, the methods, and the limits of religious psychology. The psychologist distinguishes general religious psychology, dealing with the common phenomena of religious life; typological studies, referring to the influence of sex, country, temperament, teaching, special gifts of grace; and genetic analysis, describing the origin and development of religious attitudes. The main problems and difficulties, the relation to other sciences, the attempts of certain psychologists to give

an altogether natural explanation of religious phenomena are briefly discussed. The author's intention is more to sketch a program than to give a complete description of this field of research. But he makes perfectly clear the importance and the usefulness of empirical study of religious experience and religious behavior, and his statements may be very useful as an introduction to the study of religious psychology as well as an apology of this branch of psychological research in view of the many who feel that psychology has no right to investigate problems ultimately related to supra-empirical factors.

Gelijkenis van Tweelingen. By B. WOLTRING. Amsterdam: H. J. Paris, 1938. Pp. 227 and 25 Tables.

A doctoral dissertation submitted to the Catholic University at Nijmegen. The similarities and dissimilarities of 17 pairs of identical twins are studied by means of psychological comparison; 6 pairs of non-identical twins are analyzed according to the same principles. The careful analysis leads to the conclusion that the usual opposition of hereditary and environmental factors is applied in too simplistic a manner. The study of identical twins does not give any reliable data for the interpretation of the heredity of isolated mental faculties or abilities. There are especially no facts which would justify in any way a deterministic theory as if individual character and individual morality depended exclusively on hereditary factors.

Psychologische Analyse von den Jeugddagboek van Frederik van Eeden. By A. H. STARMANS. Amsterdam: N. V. van Munster's Drukkerijen. Pp. 147.

This doctoral thesis of the Catholic University of Nijmegen studies the diary kept by Frederik van Eeden, a well known writer and social reformer, born 1860 in Harlem. The intention of the author is to contribute to the psychology of youth in general, to prove the usefulness of the analysis of diaries, and to supply material for the biography of the diary's author. He points out several characteristic features of adolescence, among which the development of independent and reflex thinking seems to be the most important.